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(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)			
(57) Abstract			
Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.			

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect.

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25 Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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35 Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

20 In other embodiments, the present invention provides an isolated polynucleotide
consisting of a nucleotide sequence selected from the group consisting of:

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NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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10 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;
or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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30 NO:1405, SEQ ID NO:1406, SEQ ID NO:1407, SEQ ID NO:1408, SEQ ID
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NO:1413, SEQ ID NO:1414, SEQ ID NO:1415, SEQ ID NO:1416, SEQ ID
NO:1417, SEQ ID NO:1418, SEQ ID NO:1419, SEQ ID NO:1420, SEQ ID
NO:1421, SEQ ID NO:1422, SEQ ID NO:1423, SEQ ID NO:1424, SEQ ID

NO:1425, SEQ ID NO:1426, SEQ ID NO:1427, SEQ ID NO:1428, SEQ ID
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NO:1437, SEQ ID NO:1438, SEQ ID NO:1439, SEQ ID NO:1440, SEQ ID
5 NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID
NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID
NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID
NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID
NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID
10 NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID
NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID
NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID
NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID
NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID
15 NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID
NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID
NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID
NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, SEQ ID NO:1500, SEQ ID
20 NO:1501, SEQ ID NO:1502, SEQ ID NO:1503, SEQ ID NO:1504, SEQ ID
NO:1505, SEQ ID NO:1506, SEQ ID NO:1507, SEQ ID NO:1508, SEQ ID
NO:1509, SEQ ID NO:1510, SEQ ID NO:1511, SEQ ID NO:1512, SEQ ID
NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID
NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

1	BK8	32		62	DY307	93	DY611	
5	2	BV216	DW1001	63	DY643	94	EC259	
	3	BV274	33	DW831	64	DY656	95	DY711
	4	BV48	34	DW859	65	DY675	96	EC248
	5	DN351	35	DW875	66	DY988	97	EC32
	6	DN381	36	DW888	67	DY992	98	DO703
10	7	DN405	37	DW901	68	DY225	99	DO713
	8	DU651	38	DW902	69	DY236	100	DR294
	9	DU660	39	DW904	70	DY242	101	DY1
	10	DU675	40	DW905	71	DY254	102	DY10
	11	DU684	41	DW906	72	DY914	103	DY106
15	12	DD364	42	DW929	73	DY946	104	DY117
	13	DD379	43	DW981	74	DY955	105	DY148
	14	DD389	44	DX191	75	DY959	106	DY167
	15	DD401	45	DX219	76	DY961	107	DY17
	16	DD413	46	DX245	77	DY981	108	DY174
20	17	DD426	47	DX256	78	DY357	109	DY175
	18	DD428	48	DX267	79	DY358	110	DY178
	19	DN293	49	DX66	80	DY381	111	DY23
	20	DD454	50	DX81	81	DY413	112	DY27
	21	DD472	51	DY780	82	DY414	113	DY41
25	22	DD475	52	DY803	83	DY415	114	DY42
	23	DT306	53	DY809	84	DY431	115	DY8
	24	DW282	54	DY814	85	DY433	116	DY93
	25	DW300	55	DY261	86	DY436	117	EB107
	26	DW303	56	DY264	87	DY543	118	EB113
30	27	DW323	57	DY266	88	DY565	119	EB163
	28	DT258	58	DY271	89	DY585	120	EB25
	29	DW246	59	DY287	90	DY331	121	EB77
	30	DW324	60	DY297	91	DY586	122	EC172
	31	DW333	61	DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
	10	269	EF121	303	ER524	337	FE141	371
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
	20	279	EH22	313	FA8	347	DI303	381
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
	30	289	ER343	323	FA171	357	FG126	391
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
	10	405	FG492	439	FM13	473	FP71	507
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
	20	415	FG708	449	FM95	483	EI243	517
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
	30	425	FH116	459	FK32	493	FO147	527
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94

	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
	10	677	DU475	711	DX316	745	GG73	779
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
	20	687	FZ639	721	DY508	755	EA7	789
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
	30	697	DX279	731	GE51	765	GE524	799
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
	10	813	FX234	847	DD518	881	GQ56	915
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
	20	823	GA135	857	EK424	891	EK499	925
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
	30	833	GP56	867	GP123	901	EL391	935
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
	10	949	FE207	983	EN108	1017	EM341	1051
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
	20	959	GN45	993	FS87	1027	GX48	1061
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
	30	969	GS4	1003	GM266	1037	GU608	1071
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
10	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
15	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
20	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
25	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
30	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HMS4	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	II113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
	10	1357 HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
	20	1367 HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
	30	1377 IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548		1515	IQ58
	1482	IJ1043		1516	IS488
	1483	IJ1048		1517	IS564
	1484	IJ1054		1518	IT23
5	1485	IJ1088		1519	IT44
	1486	IJ777			
	1487	IJ887			
	1488	IJ907			
	1489	IJ928			
10	1490	IJ942			
	1491	IL1			
	1492	IL100			
	1493	IL112			
	1494	IL28			
15	1495	IK11			
	1496	IK14			
	1497	IK20			
	1498	IK203			
	1499	IK209			
20	1500	IK212			
	1501	IK343			
	1502	IK73			
	1503	IO134			
	1504	IO138			
25	1505	IO151			
	1506	IO202			
	1507	IO209			
	1508	IO31			
	1509	IO356			
30	1510	IO420			
	1511	IO62			
	1512	IQ15			
	1513	IQ45			
	1514	IQ55			

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the 5 one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

10 As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins 15 which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. 20 McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion 25 could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence 30 listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification 5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that 10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making 15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the 20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions, 25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) [‡]	Hybridization Temperature and Buffer [†]	Wash Temperature and Buffer [†]
5	A	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	< 50	T _D *; 1xSSC	T _D *; 1xSSC
10	E	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
	F	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	< 50	T _H *; 4xSSC	T _H *; 4xSSC
15	I	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	< 50	T _J *; 4xSSC	T _J *; 4xSSC
	K	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	< 50	T _L *; 2xSSC	T _L *; 2xSSC
20	M	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
	P	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	< 50	T _R *; 4xSSC	T _R *; 4xSSC

5 *: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

10 *: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

15 *T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

20 Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

25 Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The isolated polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, Nucleic Acids Res. 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, Methods in Enzymology 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the 5 protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any 15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, 25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting 30 expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which
5 will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently
10 purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or
15 all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic
20 animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are
25 known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological
30 processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modifications are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

- The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.
- Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

- Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

- Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

10 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Bertagnolli et al., J. Immunol. 145:1706-1712, 1990; Bertagnolli et al., Cellular Immunology 133:327-341, 1991; Bertagnolli, et al., J. Immunol. 149:3778-3783, 1992; Bowman et al., J. Immunol. 152: 1756-1761, 1994.

20 Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; DeVries et al., J. Exp. Med. 173:1205-1211, 1991; Moreau et al., Nature 336:690-692, 1988; Greenberger et al., Proc. Natl. Acad. Sci. U.S.A. 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 - 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.
- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun. 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases causes by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course, 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other 5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune 10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from 15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as, for example, B7)), e.g., preventing 20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated 25 through its recognition as foreign by T cells, followed by an immune reaction that destroys the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (e.g., B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the 30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfet them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected
5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured
10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-
15 3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986;
Takai et al., J. Immunol. 140:508-512, 1988; Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa
20 et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Bowman et al., J. Virology 61:1992-1998; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., Cellular Immunology 133:327-341, 1991; Brown et al., J. Immunol. 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching
25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, J. Immunol. 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

25 Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelosuppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet 5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post 10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al., 20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994; 25 30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

A protein of the present invention, which induces cartilage and/or bone growth in 10 circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma 15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract 20 bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the 25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein 30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or 5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural 10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized 15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from 20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of 30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins and are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention, 20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may 25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et
30 al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A 5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

- 1.0 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

1.5 Receptor/Ligand Activity

- A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors 20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction. 25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

- Suitable assays for receptor-ligand activity include without limitation those 3.0 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or 10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality, 15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

20 Tumor Inhibition Activity

In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor 25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the
5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent
10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for
15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a 5 composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the 10 invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF₀, TNF₁, TNF₂, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or 15 use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects 20 of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric 25 or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T 30 lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, 10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, 20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a 25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either 30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers, antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is
5 contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 ng to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the
10 present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the
15 pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus,
20 and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal
25 antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the
30 protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also 5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and 10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices 15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such 20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt %, preferably 1-10 wt % based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of 5 the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in 10 question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired 15 patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type 20 of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress 25 can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other 30 known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	Peripheral Blood Mononuclear Cell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

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(A) MEDIUM TYPE: Floppy Disk
 (B) COMPUTER: IBM PC Compatible
 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER:
 (B) FILING DATE:
 (C) CLASSIFICATION:

(vii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Brown, Scott A.
 (B) REGISTRATION NUMBER: 32,724

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (617) 498-8224
 (B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GGAGATGTTG AGGTGGCTGC TGACCTTGGG TCTCATCTCC TTGATTTCT TTATCTTCTT	60
CATTGCCGTC CTCTCTAGGC TGTCTTGCG GAGGAGGGCC CCTGCGGAAT CGTGGTCTAT	120
ATCCCCGATA CATATTCTGC CTCACTGGTC TACCTTGTTC TCCTGCACCC TGGTTGTCAG	180
CACCCCTCCAT CACTTCTCCC TGCACAGGAG GGTTGGAATA CTGTGGTCGA CGCCCATAGG	240

GTCTCCGCAT GTAGTAAGGT GGGAACCTTC GCCTGCGGTA GGGCCGGCGT TGTGGGCCT
 GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTCCCC ACTCTCACTA TTCTGGTAT
 TTTGCTGGTA ATTGCGTGGGA GGAGAACAGG TAGACTCGAG 300
 360
 400

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 165 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTACA TAAATATTCT GAATTCAAGC
 TTTTGAAAAA GTTGTGGACC CAAGAATACT AGGCCGCAT TTTCTTACGT CAACATTCTT
 TCCAGGATGA TGAATGGACT GTTCTTTG GCCCCCTATC TCGAG 60
 120
 165

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCTAGA CCTTCCTCTC CTACTCCCTT CCTTAGGCTC CTGAACCTCGT TTGCTCCTAA
 ATCTTGTAA TTCTTTCTC CTGGATTTTG GTTTCTTTG GCTTTCCCTT GCCTTCCCT
 TTCTCTGTCT CCAACACTCT TTCCCCATGT CTTCTGGCT GTCTCTATGT TCCTCTCTC
 TTATCCTCAA CTTCTGTCC ATTGGGCTT CCTCCCCACC TCCCACGCC CAGCCCTCC
 CCTCTGGTC TCCCTTTCGA TATGCCAAC CAATTTGGG TCGAGTGCAT TCCTCTCGAG 60
 120
 180
 240
 299

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTA
 ATGACTAAAGT TTCACTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTAAAGTC
 TTAATTTCGT AAGATTATGT AAAGGTTAAG AAAGAAATTG TAAGTAAAAA TGATAAAACC
 AAGCAAATGT TTATTAGTTC AATTGTTTT CTTTTATCT TGCAGCAACG CACATCTCGA
 G 60
 120
 180
 240
 241

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAATTCTGGCC	TTCATGGCCT	AGGAAATGAC	TTTATTGTGG	TTGAATTAGT	TAAGGGTAC	60
TTACATTACG	TGTTTGATT	GGGAATGGT	GCTAACCTCA	TCAAAGGAAG	CTCAAATAAA	120
CCTCTCAATG	ACAACTAGTG	GCACAAACGTG	ATGATATCAA	GGGACACCAG	CAACCTCCAC	180
ACTGTAAAGA	TTGACACAAA	AATCACAAACG	CAAATCACCG	CCGGAGGCCAG	GAACCTAGAC	240
CTCAAGAGTG	ACTTATATAT	AGGAGGAGTA	GCTAAAGAAA	CATACAAATC	CTTACCAAAAA	300
CTTGTACATG	CCAAAGAAGG	CTTTCAAGGC	TGCCTGGCAT	CAGTTGATT	AAATGGACGG	360
CTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAATTCTGGCC	TTCATGGCCT	ATAAAATTAA	AAAATGCTAA	GGATCTGGCC	CCACAGGCC	60
CAAAGCTTTC	ACAGAGCTCC	TCTTAGACAT	GAAGATGCC	ATTGGCCTCC	TAGGTCCCAG	120
GAGGTGTGGG	CAGGACTGCC	CTTCCTCCGT	TCTCATGCG	GGGCTCTGA	AGGGGTATC	180
TGAAAGTATG	TAAATCTGAT	GGGAGGTCTG	ATCCTCTTT	TGCTAGCCCC	TGAACTCTGT	240
GGTGGACTCT	GGCTGATGCC	CAGGGCCATG	TCTTAGAGGG	GACTCCCCCTG	CAGGAGGCCG	300
GCTCTAAAGG	GAGTGGTGTG	CCTTTAGGCC	AGGGTTCACA	GTGGGGTGG	TCTGGAGACT	360
GCAGGACTCA	GGGCCTGGGG	GTGGCATCAG	TCTGGCCAGG	CCCTGCGTCA	CTTGCACCCA	420
CTGTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GGGTGGCTCA	TGCCTGTAAT	CCCGGCACCTT	GGGTAGGCCA	GGGCAGCAGG	ATCGCTTGAG	60
CCCGGGAGTT	CGAGACAGCC	TGGGCAACAT	GGTGAGACCC	TGTCTCCATA	AAATTTTTTA	120
AAAAAATTGCC	AGGTGTGGTC	GTGTGTCCT	GTGAGGCTGA	GGTGGGAGGC	TCGCTTGAGC	180
CCAGGGGTCA	AGGCTGCAGT	GAGCCATGAC	TGCACGCCAC	TGCACTCCAG	CGTGGGTGAC	240
AGAGTGAGAT	ACTGTATAAA	AAAAAAAAGC	AAAAACAAAA	CAAGAAGTAT	TATCTTAAGC	300
ATGTTATTAA	GAAATATGGA	GATAAATAAA	AATAACTGAA	AGTAGGTCGT	TGCTTCTGAG	360
GAGAGAAATT	GGGAGTTGGC	AAGGTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GCTTTGGAG CTGCTAAAT GCGGATTAC CTCGGGCCG ATCAGCGGAA GACCAAAGAG	60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTTGTTGAAA	120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTAGCAA	180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAAGAAT CTGACACTGG CCTGGCCCCA	240
CCAGCACTCT GGGATTTGCG TGCGATAAG CAGACACTCC AGAGTGAACA GCCTTACAG	300
GTGCCAGGT GTACAAAGAT AATCAATGCT GATTCCGAGG ACCCACTCGA G	351

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GTGATGTGTC ACCCCAAGTG CTCCACGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA	60
TATGCCACAC ACTTCACCGA GGCCCTCTGC CGTGACAAAA TGAACCTCCC AGGTCTCCAG	120
ACCAAGGAGC CCAGCAGCAG CTGCACCTG GAAGGGTGA TGAAGGTGCC CAGGAATAAC	180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGAGGGGATC AAAAGTCCTC	240
ATTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGGCGG TGGAAGAATT TGAGCTGTGC	300
CTTCCCGACG GGGATGTATC TATTGATGGT GCCGTTGGT CTTCAAACG CGAG	354

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 432 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

GAATTCCGCC TTCAAGGNNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG	60
GGGAAGACGA GGAGGAGGAG GAGGCTGCCG CAGAGGCTGC CGCGGGGGCC AAACATGACG	120
ATGCCCAAGC CGAGATGCCT GATGACGCCA AGAACATAAGG GGGGAGAGA TGGATGAAGA	180
GAAGGCCAC GAAGAAAAAA GCCTGTTT GTTTTCCCA GAATATCGAT GGACTTAAAGA	240
AGGCTCAGGT TTTGACCAA AATACAATGT GAATTATTC TGACATTCT AAAATAGATT	300
AAATTAAAGC AATTAGATCC TGGCAGCTC GATTCAAATT TGACTTCAT TTTGAACATA	360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAC CAAAATTAT GTTTCATGG	420
TCTCTCCTCG AG	432

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 687 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

CTATTTACA	TGCCACCAG	CATTGTATGG	GGCTTCTCAC	TTGTCACAT	GCTTGCGCTGT	60
GTCATATTG	ACTTAAAGCT	TATTTGACCC	GGAAACCAAT	TTGTCCTTT	TTTGAAAGG	120
GATGGCACCA	CAGATGTGAC	GCGGACAATG	CATTTGGGA	CCCCTACAGC	CTACGAGAAG	180
GAATGCTTC	CATATGTCCT	CAAGGGCAC	ATAGCTGTGA	GTCAGCCGT	TTTCCCGACT	240
GGAACCAAAG	GTCACCTTCT	TGACTCCCTT	GCCCGTTCA	CTTTATGGGA	TTCAGGCCTA	300
GATTACTTGC	ACGGGACTGG	ACATGGTGT	GGGTCTTTT	TGAATGTCCA	TGAAGGTCC	360
TGCGGCATCA	GTACAAAAC	ATTCTCTGAT	GAGCCCTGG	AGGCAGGCAT	GATTGTCACT	420
GATGAGCCCG	GTTACTATG	AGATGGGGCT	TTTGGAAATTC	GCATTGAGAA	TGTTGTCCTT	480
GTGGTTCTG	TGAAGACCAA	GTATAATT	AATAACCGGG	GAAGCCTGAC	CTTTGAACCT	540
CTAACATTGG	TTCCAATTCA	GACCAAAATG	ATAGATGTGG	ATTCTCTTAC	AGACAAAGAG	600
TGCGACTGGC	TCAACAATTA	CCACCTGACC	TGCAGGGATG	TGATTGGAA	GGAATTGCAG	660
AAACAGGGCC	CCAGGAAAGC	TCTCGAG				687

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 420 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GAATTGGCC	TTCATGGCCT	AGTCGGTGGG	TGCGCTGTAGT	CCCAGCTACT	TGGGAGGCTG	60
AGGGAGGAGA	ACTGCTTGA	CCCGGGAGGC	AGAGGTTGCA	GTGAGCCGAG	ATTGTGCCAC	120
TGTACTCCAG	CCTGGGCCAC	AAAGCAAGAA	TCTGTCCTAA	AAAAAAAAAA	AAGAAAAGAA	180
AAGAATAAAAT	TTCTTTTCCC	CTTGAAGAAG	TTGATTTAGG	CACAGACTCT	GGACTCTGGA	240
TTTCCACAA	TGTCTTATCT	AGTCAACTCA	AGTATCTGG	CTACAATTT	CTTGAAGAGCA	300
AAGCCCCATAT	ATTAATAATC	TTTACTTGT	TATAAAATATT	CAATAAATCA	TIAAGTAAAT	360
GTGTAGAAGA	ATTTTATGCT	CAATAAGATC	CACCCGATCA	TGCATTGAA	AATTCTCGAG	420

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

GAATTGGCC	TTCATGGCCT	AGCACACACT	CTGCTTTCT	GTCACATCC	CATTTGGGG	60
AAAGGAAAAG	TCATATTTAT	TCCTGACCC	CAGTTTTTA	ACTTTCTC	CCAGTTGTCC	120
CCCTCTTCTC	TGGGTGTAAG	AAGGGAAATT	GGAAAAAAAT	TTATATATAT	ATTCTCTT	180
TAATGGTGGG	GGGCTACTGG	AGAGGAGAGA	CAGCAAGTCC	ACCCCTAACTT	GTTACACAGC	240

ACATACCACA GGTTCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG	300
GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTAATT GTCTTAATT TTTTCTATT	360
ATTAACAAAC AGGCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACCTTT TCCTGCCAAT	60
AAGCAAAGTG TTGAAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTCA	120
GAATATGTTG GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACCTTCAA	180
GAACAGATGCCC GTGGTGTGA TCCATTAAAG GATATAATT TATATGTCGA GGAGGAGATG	240
AAAAAAACACATCCCCAGA GCCAGTTGTC ATCGAAATAG TCTGGTCAAG TGTAATGAGC	300
ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACCTGAAAG	360
CAATACAGCC CTCTACTTGC TGCCCTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA	420
CTGAAGATTG AGGAGTATTG CTATGACAAC ATTCAATTCA TGAAAGCCTT CCAGAAAATA	480
GTGGTGTCTT TTTATAAAGC TGAAAGTCCTG AGCGAGGATG CCCTCGAG	528

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTGGGCC TTCATGGCCT AGCCCGAGGCC ACGCTACACT CTGCCACAC TGGTGAGCAG	60
GAGGTCTTCC CACGCCCTGT CATTAGGCTG CATTAACTCT TGCTAAATAA AAGTGGAGT	120
GGGGCGTGC CGTTATCCAT GTATTGCTT TCAGCTCTAG ATCCCCCTCC CCTGCTGCT	180
CTGCAGTCGT SGGTGGGGCC CGTGCCTGG TTCTCCTTGC TAGCGTCAC GGTGTTGAAC	240
TGGGACACTG CGGAGAAAGG GGCTTTCATG TCGTTTCTT CCTGCTCCTG CTGCACAGCT	300
GCCAGGAGTG CTCTGCCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC	360
CTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCTG TGAGCGCC CACCCCTCG	420
AAAGAATTTC CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCAG	466

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GAATTGGCC TTCATGGCCT AGCGTGATCC TGGAACGTGC TCTAGTTCGA GAGAGTGAGG	60
GCTTIGAGGA GCATGTACCA TCTGATAACT CTTGAAGATA CAGAGAGAAA TCCATCTTTT	120
CCCAAGGTCTC CTTCACTGAA AACAAAAATC TACTTACATA CACTGTGACC TTAGCATCAG	180
AGTCGGATT AATGAACTGCG GAACAAGAGG TTGTGAGAAT CTAAGATGGA ACCTTCTTT	240
CTTTCTTCT TTTTTTTAA ATTTGTATT TTCCATCCAA CACTCGAG	288

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GAATTGGCC TTCATGGCCT AGGGCTCTGC TTATAAACTT CAAAGTTACA CTGAAGGATA	60
CGGAAAAAAC ACCAGTTTAG TAACCATTTC TATGATTGG AATACCATGA TGGAACATC	120
TATACATTAAGC ATTCCCTGGG GCATAAAACA GGCTGGTTT ACTACTGGAA TGTGTGTCAT	180
CATACTGATG GCCCTTTAA CACTTTATTG CTGCTACAGA GTAGTGAAT CACGGACTAT	240
GATTTTTCA TTGGATACCA CTACCTGGGA ATATCCAGAT GTCTGCAGAC ATTATTTGG	300
CTCCTTGGG CAGTGGTCGA GTCTCCTCTT CTCCCTGGTG TCTCTCATG GAGCAATGAT	360
AGTTTATTGG GTGCTTATGT CAAATTTCTT TTTTAATACT GGAAAGTTA TTTTAATT	420
TATTGATCAC ATTAATGACA CAGACACTAT ACTGAGTACC AATAATAGCA ACCCTGGTCT	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

GAATTGGCCT TCATGGCCTA GGAGATATAAC CTAATGCTAG ATGATGAGTT AGTGGGTGCA	60
GCGCACCAAGC GTGGCACATG TATACATATG TAACTAACCT GCACAAATGTG CACATGTACC	120
CTAAAACCTTA AAGTATATAT AAAAAAAAAA GACNTCGCTA GTGAGCAGGC TGATACGAC	180
ATCGCTAATG AGGACACCAT ACAAGGCATC GCTAACATG AGCGCTGTACA CAACATCACT	240
AATGATGACA CGGTATAAGA CATCGCTAAT TATGACCTG TATACGACAT CGCTAATGAC	300
ACCGTACGAG GCACGCTAAC AAGGATGCTG TACACACAT CGCTAATGAG GACAGTGTAC	360
AAGCCATCGC TAATGAGGAC ACTGTATATG ACATTCGCTAA CGAGGACACT GTACAAGGCA	420
TTGCTAACGAG GGACGCTGTA CACAACATCG CTAATGACAC CATATAAGAC ATCACCAATG	480
AGGATGCTGT ATATGACATC GCTAATAACA CCGCTCGAG	519

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GCAGCTCTCA	TCCTCGTCTC	CCCAACACCA	TAACGTCCTC	ATCCCCTC	CAACCCACAC	60
CAGGCCGAAG	CCCTCAGAGA	GTGTTTCAT	CAGGAACCAC	TCTCGAACCT	GAAGGTTGAC	120
TTTAGCGTTT	AGCAACCCAG	GGCGGTGTGT	GTGTTTCCG	TTTTGTTTC	TGAGTGGTAG	180
CAGTGATCAC	CGTAATTCCA	TGTAGCCATG	TGCTAGCAGA	ACCCCTGTGT	CCTCACCGTG	240
GCCCCTGTGA	CCCCAGCCGA	CGAGTGCCCG	CGGGACTCCC	CGCTGCCCTC	CCATGGTCCA	300
GTGAGCTGCC	AGGGCATCAC	ATGACTCTCA	GCTGGGCTCG	AG		342

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAATTCCGCC	TTCATGGCCT	AGAGCAGCTC	TGAGGTAGAA	ATTACAACGA	TGAAAAGAGC	60
ACAAACGTACA	AAACCAAGAA	AGAGTCTGTT	GTGTGAAGGG	TCATTCGATG	AAGAAGCTTC	120
TGCACAGTCC	TTTCAGGAAG	TGTTAACGTC	ATGGAGAAC	GGAAATCATG	ATGACAACAA	180
GAAACAGAAAT	TTACATGCAG	CAGTAAAGA	CTCATTGAA	GAATGCGAAG	TACAGACTAA	240
TCTGAAAATT	TGGAGAGAAC	CACTTAATAT	TGAACCTAAA	GAAGACATTC	TATCCTATAT	300
GGAAAAAATT	TGGCTTTAAA	AAACACAGG	AACTCCACAA	GAGCAACTTT	TTAAAATGCT	360
ACCAGATACG	TTCCCACATC	CACATGAAAC	CACTGGTGT	GCACAGTGT	CTCAAAATGA	420
AAACGATGAA	GATAGTGTATG	GTGAGGAGAC	CAAAGTACAA	CACACAGCTC	TTTTTATTGCC	480
AGTAGAAACA	TTAACATAG	AGAGACCTGA	ACCATCTCTA	AAGATAGTCG	AACTGGATGA	540
TACTTATGAA	GAGGAATTG	AAGAACAGA	ACATCTCGAG			580

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GAATTCCGCC	TTCATGGCCT	AGAAAGATCT	AATTATCATG	GACCTGCCAC	AGTTTCTTAT	60
GTGCCTGTCC	CTGTGCACAG	CCCTTGCCCT	GAGCAAACCC	ACAGAAAAGA	AGGACCGTGT	120
ACATCATGAG	CCTCAGCTCA	GTGACAAGGT	TCACAAATGAT	GCTCAGAGTT	TTGATTATGA	180
CCATGATGCC	TTCTTGGGTG	CTGAAGAACG	AAAGACCTTT	GATCAGTTGA	CACCAAGAAGA	240
GAGCAAGGAA	AGGTTGGAA	AGATTGTAAG	AAAAATAGAT	GGCGACAAGG	ATCGGCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GAATTGGGCC TTCATGGCCT	AAAAAAAGGA	TGGTGTGTTG	AGACCAGAAG	CAGCAGCAGT	60
CCTCGACATC	AACTACAAT	TTCCCTCGCA	CAGTGATAC	CCTCTGATAT	120
ACGCCTATCC	TCCAGCCCC	TAAGAACTAG	AGAGGGAGCC	TCACAAACATT	180
CCTTCAGAAA	ATTCATTACT	CTTCAGGTT	GTCGTGTT	TTGTGACAAC	240
GGTGAAAT	GGCTTGAAAC	TAATTAACAA	ACATAGAAC	GATATGACTA	300
CACAATCTGA	GGATTTAGGG	ATGAAGCTCG	AG	CATATACGTG	332

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GAATTGGGCC TTCATGGCCT	ACCAAGCCTGG	GCGACAGAGC	AAGACTCAGT	CTCAAAACAA	60
AAACAAACAA	ACAAAAAGA	GAAGGCTATT	ATTAACATTC	GAGATAATGT	120
TTCATGTAT	TTTCATTATT	CTGCCCCAA	TCTGGTGAAG	TGGGTATCTG	180
TCTAGATTGA	ACAACATAGTA	AGGGGGCTGG	CCCTGGAGAA	AGTTACCTCC	239

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

GAATTGGGCC TTCATGGCCT	ACTTTTATAT	TGTTATTTT	GTAAAGCATC	TTTCTTCAA	60
TTCTTGTG	CATTCTGGC	CAAATATTT	CAGGTGTT	CGGTGTGGAG	120
CAGCGTTTT	AGTGGAGAAA	TGGGAACAG	CATCAAGAAA	GGCTTTTTC	180
TTTTTTTGG	AGACAGACTC	TTGCCCTGTC	ACCCAGCTG	GAGTGAATG	238

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

GAATTGGGCC TTCATGGCCT	AGATGGATT	CTTAATTGAA	GTACTTTAT	AATCACAGTG	60
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ACTGAACAAA ATATTTCAA AGACATTGT CATTCTAA AGCCAAGATT TAAAGACTA	120
ATGTCCTTC TGAGGGTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG	180
TCTGATAAT TTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G	231

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTCCA	60
ATTGTCTGTG TCATTTCTTC ATCTGCTCTC ACTGATTTTT TCTGCTTCTG TTTACTCTTC	120
ATTTGGACC TATTTCCCT TATTTGGTGC TTTGCATACA ATTGTTGGG ACTGGATCTT	180
TGCTAGTCCT TTAAATGTTT TTAAGCTTGT TTTGGGATG CAGTTAGGTG ACTCAGAAC	240
AATCAGAAC AATTTGATCC TTTTATGCT CTTAAGCTTT GTTATAGCA GGACCCAGAGC	300
TCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCCACCT GGTCTTCCTT CTTCAAGTCTC	60
TTCAAGTCTTT CCCAAAGCTC TTGAATCTTA CATGAACCCA TGCCTCGTC AAAATATTAC	120
AGGCTGCAGC CAATCTCAA GTGGCATACA GGCACAAACAT CCATTATATAA TATGGTTGGA	180
ATTCTAACCA CATTATATCA TAGATCTAAAT GCCATACAAAT AGGTGGAGGT TAGATCCTCA	240
CGCAACTCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT	60
TCTCCTCGCT CCATTCTGTC CACATTTGTG TGAGCACATC TGGACACTCC TGGAAAGCC	120
TGACTCAATT ATGAATGTTT CATGCCCTGT GGCAGGTCT GTTAATGAAG TTTTAATACA	180
CTCCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAACTATAT	240
GATGCCAGCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:29:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 211 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GAATTCCGCC TTCATGGCCT ACGAGAAGGA GTGGAAGAGT AAGCAGACTA GGAAAATACA	60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT	120
GGTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCCAGAGTT	180
TGTTTTAACT AGAGCTCTGG TTTTGCCAAA C	211

(2) INFORMATION FOR SEQ ID NO:30:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 521 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GAATTCCGCC TTCATGGCCT AGGATCAGGT TCGTCCTTA GTGTTGTGTA TGTTTATCAT	60
TTGTTTGAG GTTAGTTGA TTAGTCATTG TTGGGTGGTGT ATTAGTCGGT TGTTGATGAG	120
ATATTTGGAG GTGGGGATCA ATATAGGGG AAATAGAATG ATCAGTACTG CGCCGGGTAG	180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATT TCGTTCATTT TGTTCTCAG	240
GGTTTGTAT ATTATTTTAT TTTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA	300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA	360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAC GTCAGTGGAG GTGGAGTCAC	420
AGGAACTACA GGTCACTGGA GTTGGAGCAC AGAGACTACA GGTCAGTGGA GTGGGGCAC	480
AGAGACTACA GGTCAGTGGA GTTGGAGCAC AGAGACCACA G	521

(2) INFORMATION FOR SEQ ID NO:31:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

GAATTCCGCC TTCATGGCCT AAAATTTCCT CTAAGTACTG ATTTAGCTGC ATTGTATAAG	60
TATATGCTTC CATTTCATT CATTTCAAA TATTTCTAA TTTCTTTGC AATTTTTTTT	120
TCAGGAATTC GGGCCTTGCT GTGTTGCCA GGCTGGAGAG CAGTGCCACT ATCACAGCTC	180
ACTATAAACT CAAACTCCTG GGCTCAAGCA ACCCTCCCAC CTCCCAACTC CCCTCGAC	238

(2) INFORMATION FOR SEQ ID NO:32:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

GGTTTCTTAA	AAAAAAAAAA	AAAAGGAATT	TGATCCAGAG	CAATTTTCT	CAATTAAAAT	60
TTGTGATTAC	ATTCCTGAGT	TTCCATGGCA	GAGTTGTGAG	TGGGGCTGTG	ATATAATTAA	120
ACTTCTCCTA	AATTGCTGAC	ACCGATAACC	CTATAAATTA	ACAGATGGCG	GAGGGAAATC	180
TCCCTGGCTTC	TTCCTGGCTA	GTTTTTTTA	ATGGTCTGAT	TTTTGTAATA	GGGGTTTGA	240
GTCCCCAGCCG	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:33:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

GAATTCCGCC	TTCATGGCCT	AAAGACTTAC	GTTATATTTT	CATATACTCC	TTCCCACCTCT	60
TAGTGTTG	TCAATATACA	TTTTGTTTA	CATGAAAAAA	CACCACAGTA	TATTGTTCTT	120
AATTGGCTT	TTAATAGTAA	ACTGCTTAT	AACAAATTAT	GAAAATGGAA	AAAAACATGT	180
CTTCTTATT	TGCCCTCATA	TTTATCCATT	TAGGCACTCT	TCCTTTTCC	CTTCATTCC	240
AGGTTCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:34:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

GAATTCCGCC	TTCATGGCCT	ACTAACATT	ATGAAAATTA	TTTGTAATA	AAATAAGAGG	60
CATTGAGATT	AAAATTGGAG	ATAAAAGTTGC	TGATGTGTTG	TTTCCTGAA	GTATTTTTT	120
TCTTAATTCT	GATCTTGTGTT	TCCCAATACA	ATCACACTCA	CACCCCTGCA	GTTCAGTTTC	180
CTGACCGACTC	TCTAGTGTGTC	CAGATCTGTG	TTTCTATGTC	AGTGATCTGT	TCCCCATCTC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:35:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTG	60
GTTTCATCAA GTGTGTGGAT CGTGATGTTG GTATGTTCTT CCACTTCAGT GAAATTCTGG	120
ATGGGAACCA CCTCCATATT GCAGATGAAG TAGAGTTAC TGTGGTTCTT GATATGCTCT	180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAACTCC CAAGGGCAGC GTTTCATTTC	240
ATTCGGATTC AGATCACCGT TTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC	300
CTAAAACAC TAGCCCAAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT	360
ATGATGACTG TGGGGGTCTC GAG	383

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTC TTGTGTGCTC GTTGGTGCG	60
GACCTGCTAC CTCTTTGTG AAGCGGCAGC TGAGGAGACT CCGCGCTCG CCATGCCGA	120
CGAAAAGCTC GAG	133

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GAATTCGGCC TTCATGGCCT AAGGTTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT	60
TGGGGGGTGG GGTTTACCCA AATAGTTCA CAGAAGAAC AGAAATAAAA CCTGCCCTTC	120
TAGACTGTAA GTCTTGAT GTCTCATCTAA ATGGTTGCT CTATACAGCA ACTCATCTCT	180
AGAAACTGAAA ATAAGTTAA ATCCCCCTTC CATCCCCAAT AATTCAAGCT GCATTTCAGA	240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTGTGC TCTTAGAGTA GGAGTTGGAA CTATAGGACT TGAAGGCAAG AGCAGGTATC	60
TTATCAAGGA TCTACTCACT CAGTTCCCT AAAGCTCTCT CTCCAGATCG GATTCACCG	120
CACATCATGA CAGATGTTCC GGCTACATT ACCCAGGCTG AGTCTAATGG GGATAAACCA	180
CCTGAAAACG GTCAACAAAC AATCACTAAA ATCAGTGAGG AATTGACTGA TGTTGGACAGC	240
CCCCTGCCAC ACTACAGGGT AGAACCCAGT CTGGAAGGTG CACTCACCAA AGGAAGTCAG	300
GAGGAAGAGA GAAAATTACA AGGGAACAGA CTCGAG	336

(2) INFORMATION FOR SEQ ID NO:39:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 385 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

GAATTCGGCC TTCATGGCCT AGTCGGAGAA GGACATCCAG GATCTGAAGT TTGGGGTCGA	60
GCAGGATGTT GATATGGTGT TTGCGTCATT CATCCGCAAG GCATCTGATG TCCATGAAGT	120
TAGGAAGGTC CTGGGAGAGA AGGGAAAGAA CATCAAGATT ATCAGCAAA TCAGAATCA	180
TGAGGGGGTT CGGAGGTTTG ATGAAATCCT GGAGGCCAGT GATGGGATCA TGGTGGCTCG	240
TGGTGTATCTA GGCAATTGAGA TTCCCTGAGA GAAGGTCCTTC CTTGCTCAGA AGATGATGAT	300
TGGACGGTGC AACCGAGCTG GGAAGCCTGT CATCTGTGCT ACTCAGATGC TGGAGAGCAT	360
GATCAAGAAG CCCCGCCCCA CTCGA	385

(2) INFORMATION FOR SEQ ID NO:40:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

GAATTCGGCC TTGCTAAAAA AAAAAAAAAA GAGGCAAGTA ATGTAATATC CCCCACCTTT	60
GGTTTTCTTA TCTATAAAATA CTGATTAAGA AAAAAAGTAC ACTGCTCTGCC TTATAAGCTA	120
AAATGAGTGA ATACAGGCAA AATGCCTAC ATTTTACTTT ACATTTACTA AGCACCCAGA	180
AAATGTTAAC TATGATGACA ATTATGATGA TGATGATATT GATATTTCAGA AGGAGGGCGC	240
TCGAG	245

(2) INFORMATION FOR SEQ ID NO:41:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

GAATTCGGCC TTCATGGCCT AAATAAAAGAT GATTTTGTC CTTAGCAGTT TAAGGTATAT	60
GGCTGCATAT GCAAAACTCT TTCCCAATTC AGTCGCTACT TTTACTTCTG CCCTTTCTAT	120

CCATCGTCTT CATTGGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTAT	180
TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTC TATTTATCTA GCTGTACAGA	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 106 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACCC ATTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA	60
TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG	106

(2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 237 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTCC AAGTGTATGT ATTTCTAAAG ATAGATTTT TAAAAACAAA AAATCTTAAT	60
TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTTCAAA GCAACTTGAT CCTGTAAGTT	120
TTGGCATCTT AAGTGGAAAT GTTCATGCAG TTTTGTGGA TCTTCGCTAT GGCAGTAAAA	180
TGCAATAACAG CACTGTGGTT AAGAGTGCAG AACCGAGTCA GTCAGCTGA ACTCGAG	237

(2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 476 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCCGCC TTCATGGCCT ATAGGCCATG AAGGCCGCC TTCATGGCCT AGGGAGTNGG	60
TGTGTCTGTC CATTATTTG GATCATGGAA GGTTCTAGAT GTGTATTCT AACTGTAGAT	120
AATGGAGGAC ACATATTTGG GGAGTTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG	180
TGGTATTCTCT CTATGTTTG GTGGGTGGGG TATGTATCCA TCAAATATC TCAGATTATC	240
TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCAAC AAGGTAGGTT TCTCATGTAT	300
GTATGTGTC CTCCATTGGT TGCGTTGAT CAGTTACTGG TCCTGTGCT TGGATCCAGA	360
TGGATGAAGC GGCCTCATTT GGGACAGGAC TAGAAGGACT TCTCTGCTC AGACTCATAC	420
ATGGCATTTC TGATCACATT TCATTTGCCA TAACAAGTCA TGTGGCCATA CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

GAATTCCGCC TTCATGGCCT AGGCAAACTC TGCTGGACTT AACTTCATCA ATGTAGTGGG	60
CTCTGTTGT GGGGCCAGG CTTTGATGAG TGTTCAAC CCCATGCTGG GCTGTAACAC	120
TGGTGCATA ACTCTGCGAG GAATAACCT GAGCGGCCTT CTACCCCTAG GAGGTCTGCT	180
ACCAAATGCA CTGCCCAGTG CAATGCAGGC AGCTTCTCAA GCAGGTTTC CATTGGTTT	240
AAAAAAATCT TCAAGTCTCA GGCCCTTAAAC TCTACTCCAG CTTCCAGGTG GTTCACTTAT	300
TTTTAACACT CTGCAGCAGC AGCAACAGCA GCTCTCCAG TTTACACCAC AACTCGAG	358

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

GAATTCCGCC TTCATGGCCT AATCATTTCG ACTTTCACTG CTTTCAATGA CCAGTGGCCT	60
CCAGGGATAA AGCAACTGCT TGGTTTGAG GGCCTCTCT GCGCTGCTGA GCCATCAGCC	120
TCCAATACGG CAATGCCCAT AGATGCTAGT TACAGCCCTG CTTCCCTCTA CATAGGGTTC	180
TGTCATCACT GAGTCTCACCC ATTCCCTCT CCCCAGTGTCTC TTTATTATGT GACACACACA	240
CACGGCACTA TGTTTAAAAA AGCGTGTCTCA CTGGCAACCT CTTGGCCTTG TGTGTTCAATT	300
CTGTGTTTG TATTGGTGGT ATCTTGGGGT CGACCGAAAG AGTCAACCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 456 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

GAATTCCGCC TTCATGGCCT AGGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT	60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGTCTTC CCCTCTGTGA	120
GCCCTCAGTTT TCTCAATAGT AAGAGGGGAT AACACACTA CCTCTCATAG CTGTGGACAT	180
GGAGGGTAAA GTGCCGCATA CACTGTAAAG TGTTATATAC GTGTAAGAGA AAAATCGGG	240
CCAGAGGCTG GGCTTGTTT AATTGATTCA CGAAATTAC CAGAGGCCCT CTAGATGCAA	300
CGTCCTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCC CACCCCTCACC	360
CCGTCAACCG TCAGTGCAGC AGTGGGCTGG GTGCTTGCCT CCCACAGTGA GGAAGGCAGA	420
AGGGGTCCCT GGCCTCAAAG GAGGACGATA CTCGAG	456

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 509 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA	60
CGATTGAAAG CACACACAGG CTTCCCGCCA CCTCCTTAA ACCGCCGCTG GCTTGCAGG	120
GACAGACGGC GCGGTTGGCT CCCCAAATT CGCACTGATA CGGCCCTCGG CGAGCGAAAG	180
CAAACGCGGG ATACTCTCGC GTTCTTGATT GGCTGCAGTT GGAATGTGATC ACACCTTTTC	240
AGTTGTACTT CAATCCTGAA TTAATCTTAA AACACTTCA AATATGGAGA TTAATCACCA	300
ACTTCTTATT TTTTGGGCA GTTGATTCA ATTTTTTATT TAAATGATT TTCTATATC	360
GTACTGTGCG AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTTGTATTTA	420
TGTTCTTTT TGTTGGATTCA TTAATGACCC TTTTTGGTCT GTTTGTGAGC TTAGTTTCT	480
TGGGCCAGGC CTTCACAATA ATGCTCGAG	509

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 467 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTCTTTT TTTTAAAGAC AGGGTCTCAC	60
TGGGTCAACC AGGCTGGAGT ACAGTGACAT CATCACGGCT CACTGCAACC TTGCGCTCTT	120
GGGCTCAAGT GATTCCCCCA TCCCCCACCC CCCTTCTCAC CCCCAGATTG GACTATAGGC	180
GTGTACCAACC ACGCCTGGCA GAGACGGGT TTTGCCGTTG CCCAAGCTGA TCTCGAACTC	240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCAACG AAGCATTTTT AAGTTTCTAT	300
GCTGTTAAC TTTTTAAC TGATTAATG ATTTGCAATTG TGTGGTATG GAATATGTTT	360
TTATGATATT GGTTGTTGAG ATTGTTGAG GTCTTTCTT GTAACTTAGT TAAACCATTG	420
CATATCTTT TAAAAGGATG TATATCCCTT ATCTGTTAGG GCTCGAG	467

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 168 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GAATTCGGCC TTCATGGCAG AGTGGAAAGGG GTTGAAATA TTAGGAGAGA GATAATTCTT	60
AGTGCATTTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGG	120
GAAAGCAGGT CAGAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG	168

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 228 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GAAAGTAAATT ATTACGATT CTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT	60
ACAGATCACG AAATGATAAG TAACCTACCG AAAGTTACAT TATTTAAGTT AATCAAATGT	120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGAAAATAC TTCTCTGAGC	180
TTCAAAAT GTTATTTCTA CTTGTCAGTG CTGCAGGAGT CTCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG	60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATTCAAGC	120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTCTTA AAATGTGTGG GTGCCCTCCC	180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCCCTCCC TACTACCATT CCTGTCCCGG	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GGCCAAAACA AAGCTTATAA AGGTTCTGC TCCCAACGTA ATTACCTCCA ATCGGCATT	60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTTGCCCAAG GATGGACTCG	120
AAATGAACCA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC	180
CATCACCGGA GCTTTTGTA TTGCAGCTAT GCCATTGGCC TCCGGCAACC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT	60
TCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT	120
TTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCT TGCTCCCTA CATTGTACTC	180
AAGTCTATGA TCTTTTACCA ATTCCCTGTA CAAAGGATT TCACGGCTG G	231

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GAATTCCGCC TTCAATGGCCT AGAAATATTTC TCCTACAAAGA GTACTGAATT TCAGGAAATG	60
GGATAGAGCT TCTAACCCAGT GTATTCCCTC AAGTAAGATA ATAACAGCTG ACCTGGCAAC	120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTCT GTTTTCAAA ATTGATGCTT	180
AATTGTAGCT GTTATTCTAA TTTGTCACAT GGAACACTAAT CATGCTTCAA TCCTTGATAG	240
AGCAAAACTC AGAACAGGTT ATGTAAAAAT ATAGTCTGGC TTTAGAATTG GTTAATTCAC	300
CTGCTTGCC ACAGAAAATG GAGACTCGAG	330

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GAATTCTAGA CCTGCCTCGA GATCTGAACT ATAATCTTT CCATTCTATC TAGCTCCCAT	60
CCTAAAGTCCT CTCCCTCTAA CGTGGAACTC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC	120
GAGACATGAG GCTGTCTTT TGGGCCTTTT GCGTTGTCAC AGTCCCAGAC CACGGAACAT	180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCCAGCG CTCCCTCGAG	230

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

GAATTCCGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAATGCGA ACACTAGCCA	60
CATGCAATCA TGGGAGAACAA GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA	120
TAAGTGGAGT TGAACCCATT CGATCATTAA CGCATGACTT TGCAAAGGTT CTCTGGAGGG	180

GGAAGAGGAT CAAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAAATCAC	240
TCTTAAAAAT GTCATGTTAC TTTAAGAATA AGCCATACTG CTGGCACCTA GAATATTTT	300
GTGGGTCCCC ATCTCTGGCT TTTCTGTTTC AAATGGCCCC CAGGCTAAGA GGCAGCTGCT	360
CACATCCCTG CAACAAACAT GTTCTTCCTT TTCTGCATAG CCTTCATTT CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

GAATTCCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTT CTAATGAATA AAAATCAAGT	60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCTTAGT GCACACACCAC CACGCCACTCA	120
AACACCCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAA ACTAATCCAC CACTTATCCA	180
GGAAAAGCCT GCCAAGACCA GCAAAAGCCC ACCACCGCTA AAAGGAGAAC TCCTTAAACT	240
AACTGAAACT GTTGTGACTG AATATCTAAA TAGTGGAAAG TCACTCGAG	289

(2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

GAATTCCGGCC TTCATGGCCT AATTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTTGAAG	60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCAGG GAAAAGACAT AGGACCTCTG	120
ACTCTAACCTG AGGTTCTGGA TTATTATGAG AGATCTCTAG AAATCGTCTA ATGGTGTGTTGG	180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCGATGAGA TTCCCCCATA	240
AAATAATTAT GGATCTGCAC TTGCAAGCTG GTCTTGCTC CAAAGACCAA GAGTTGGTTT	300
GTTGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAAATGG CTTTGTATGG	360
TAAGAAAGCT TTAATCCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 196 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

AAAAAAAAAAC CAAACCTAT TATTCATTG ACAGATTGTC TTAGAGTTGA TAGCATTTAA	60
TAATTGAGTA AGTACAGTCC TTCCCTTGTTC CCAACGTGCC CTATTTTTTC TTTCTTCTCT	120
ACTTTTGAT ATGCATTTTC CCTCTTTCTT GTTTCTGGT GAATCCCAA ACCTTTTTT	180
TCAAAATCAC CTCGAG	196

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

GAATTCTGGCC	TTCATGGCCT	AACCACATT	TTCTAATTAG	TGTTCTAGAC	TGGCTAGATA	60
AATCAACAAT	GAATCAACAG	TCTTTAACGCA	CATATACAGG	TATGATAACT	CTGTAGTTAA	120
CTCAAATCCT	TGTGCTATGT	ATTATTTTGC	TGCGTAACTC	AGAATTCAAGG	AAGCTACCCA	180
CCCAATCACT	CTTTAGCTGT	TTTATTTTCAG	TAACAAAGTTT	ATGCAGAACCC	TTCCATATCT	240
CTCATAAAAC	CAGAGCATTC	ATAGAACCAAG	AAACTCTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

GAATTCTGGCC	TTCATGGCCT	AAAAGATTG	AGCATTTC	AAATTTAAC	ATAAAAGCAT	60
AAACGTAGAT	AAAATGAAGG	TGTACTATGA	TATCTTCAGT	TTTATTCAGAA	ATGATGTAAA	120
AATTACAAACC	TCTTTAAAAA	GTAGTGTAA	TCATTAAGTT	AGAAAATATA	TAGCTGGCA	180
TGGTGGCAGA	TGCCCTGAAT	CCCAGCTACA	TGGGAAGGTG	AGGTGGAGA	ATCGCTTGAA	240
CCCAAGGCACT	GGAGGATGCA	GTGAGGCAAG	ATCATGCCAC	TGCACCCCAG	CCTGGGTGAC	300
AGAACACAAGAC	TCCATNTCAA	GGAAAAAAA	AAAGAAAAAT	ATATATATGA	ACTTCAGAAAT	360
CTGAGGGTCAT	ATATAGACAG	GTCTCCCCC	CGTCCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

GAAACCATAG	TGGCAGATT	GTAGCAAAA	GAATCTTGT	AACCTCCCT	TTAGATGTCC	60
TGTGTTATGG	CTTGGTTTTT	CTCAAAGTC	ATAGATGCA	GTGTTTATCT	CAACTCACTA	120
TTTCCTTGA	AAATTGAAC	TTTCTCTATA	TTTCCCTTC	CCCCATGCAA	ACTTTTGAT	180
TGTTTTCTG	AAATCTAA	TCATTTGACT	TACCAAGTAA	TATTGATACA	GGTCTTGAT	240
GTTATGAAGT	GCATTGTGA	CATTATCTG	TTTAATTTC	ACAAACACTCT	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

GGTCGCAGAA GAGTGTAGA ACAATCAGTT AAAGAACGTC AAAGAACATCT GTGAGAAAGA	60
AAAAGAAAGAA TTAAAGAAGA AAATGGATAA AAAGAGCCAG GAGAAGATAA CAGAAGCTAA	120
ATCCAAGAC AAAAGTCAGA TCGAAGAGGA GAAGACAGAG ATGATCCGT CATATATCCA	180
GGAAAGTGGTG CAGTATATCA AGAGGCTAGA AGAACGCCAA AGTAACCGGC AAGAAAAACT	240
CGTAGAGAAA CACAAGGAAA TACGTAGCA GATCCTGGAT GAAAAGCCCAGGGGAAGG	300
TTCCTCCTCA TTCTTGTAGG AAACCTGCCA TGAGGATCCC TCTGTTTCCC CCAAACCTCGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

GAATTCCGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTTCAAGAC	60
TTAAGAAATA TTTTTGGTT GTATTGCACT AGGAACATCTC TCCCACCTCT CCCCTTTCTC	120
TTTCTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGCCCG AAAGACTAGG	180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGAA GGTGAACTA AACTGTCGA GCTGCCTCTT	240
CCTGGGGGTG GATGCTGCTT TGGGAGGGCC AGGGAGCTG CAGGGGGACA GTGTGGGAT	300
TGTCAAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA	360
TTCCACTGAA CTGTGATTCT ATGCCGCCTC GAG	393

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

GAATTCCGCC TTCATGGCCT AATTGTTAT TGCTAGAAAA TACACAGTTT TGAGATTTT	60
GGGCATAATT GGCCTTAGTG TGTCACCTCT GCATTAAT ATAGGTTAAT AATCAGATGA	120
AAGCAGCCAA TAACCTATGG CTTCTGTACT TTCTGGAA AGTTTGTAA ATGTTTTAA	180
TTTGATTTT TCTGCTTATA AATTGTTCT TAAATCACTC CCCTCCTTCC CGCCCCCCCCG	240
ACTCCTTCTC CCTCCTTCCC GCCCCCCCCAA CTCCCTCTCC CTCCCTCCCG CCCCCCGCGAC	300
TCCCTCTCCC TCCTTCCCAG CCCCCGATCC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

GGTGACATAT TTATTGCTTC TGTTTCCAA CTACATCACT TCAACTAGAA GTAAAGCTAT	60
GATTTTCCTG ACTTCACATA GGAGGCAAAT TTAGAGAAAAG TTGTAAAGAT TTCTATGTTT	120
TGGGTTTTTT TTTTCCCTTT TTTTTTTAA GAGTATAAGG TTTACACAAT CATTCCTCAT	180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:68:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

GAATTGGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT	60
AAACCCCCAA AGGCTACCTT TTCAAATATT CTACAAACATC TGCAAAATC TTTAGTACTC	120
TGTCCTTGGAA GTCAGTCAAG AAATCCACC CCAGAAGTGT AAAACCAAT CAATAATATA	180
TGACACTGAT TTTCTCTAAA TTATTATTT TCTTATGGTT GAGTCCCTG CCAACTTTAT	240
GTTCCTCCAAT CGGCTCG	257

(2) INFORMATION FOR SEQ ID NO:69:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

GAATTGGGCC TTCATGGCCT AGCTGGGCAT GTGTGATGCAC GCCTGTAATT CTAGCTACTC	60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGTC	120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAAATGGG ATTCAATGGGG CGCAGAGGTC	180
AAAGGTGAAG CAGAAGTCAG GGGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTCCA	240
GAGTCAGAAG GGGTGTCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:70:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAATTCGGCC TTCATGGCCT AGATTGAATT TTTAACACAG TCCTCTCAGA AACTGACTAA	60
AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTAGA	120
TAAGTAGGGA TTTAAATTCA ACAAAAATAA ACACATTAA AACTCCTATA ATACATTAT	180
TTAAAATAAA TATATTTTG CAAAAAGAAG TGTAAGTCA AAGAGTTAAC ATACAGATTA	240
TATCCATGA GATATAATAA TATTAGAAAC TGGCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATTCGGCC TTCATGGCCT AGTTACATT ATAATCAGTG AGGAAAATAT AAACCTATACA	60
ATAAAATGAAA CGGTCAATTGG CCAATTGTTT GGAGGGAAAAA AATACACCAT GTTCTAAAAT	120
AAATTTCTAG TGATTTATTG TGACTTTCAT GCATTTGGAT GATTTAAAG ATTTTATATA	180
AAAATGAAAC CATAGCCTTA CGAGAAGAAA ATATAAGAA AACTTGTAT AGTCTGGGA	240
GGGGGGATTC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTCTA CCTGGATGAG AGCTCTACCA	60
CTTCTTTCTT TTTGCACACT CATCTCATTC TATGCACTCT TGGGCTGTAA CTGTCATTTC	120
TTTCTCTGTA CACTCGAG	138

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

GAATTCGGCC TTCATGGCCT ATCACATTGCA ATTAAATCTG TAGATTACAT TGAGCATTAT	60
GGACATCTTC AAAATATTC AAATTTGAA CAGGAGCATG CTGAAGAGTG TGTTGTTAA	120
TTTCTATGTA TTGTACATT TTTTTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCGG	180
GGAGACCCCA ACCCAACGGC AGCTCGAG	208

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

GAATTGGGCC TTCAATGGCCT ACATGAAACT GTTAGTCACT TCATTTCTGT TTCTTCCCTG	60
TTGCAACAGC CCATCTTCGT GGGAAAGAAC C AAGCTTTAGG CTTGGCTCTG AACAGGCCACA	120
AAGTGACTTG GCTGAGGGTCC TGCCATTTCG CTCATGCTCA GCAGGGGGCA GCAGACCAAGG	180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCGTCCCC ACTCCACCTG TGGATTTACC	240
CTGGATTGGG CAAGCCCCAT TACTCGAG	268

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

GAATTGGGCC TTCAATGGCCT ACGTGAAACAA GACCCCTCCCA AACCTTCAGG TAGTCAACCA	60
CCAGCAAGGC CCCCACACCA GACACATCCT GAAGCTGCTG CGCTCCATGG AGGCCACTGG	120
GGGCGAGAGAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT	180
ACACAAGCAT TTTGACATCA ATGAGCATTT GCCCTGGATG ATTGTGCTTT TCCTGCTGCT	240
GGTGCTTGTG GTGATTGTGG TGTGCACTAT CGGGAAAAG CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

GAATTCTAGA CCTGCCTCGA AAATACACTG TTACTATCTT AATCTCAAGA GTGTCATTAC	60
AGTGAGAACATC TCATTTAAAA GCATACCAAGT GAAATTAATA GCAGTGCTTA TCAAAGAACCA	120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTCTT CTTTAGTTC CAAGTTCCAG	180
GTAGGCCATG AAGGTCGAG	199

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GATTGAATT TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCTGAGC ATGCTGCAGG	60
ACATGAATTT CATCAACAAAC TACAAAATTG ACTGCCGAC CCTGGCCCGG TTCTGTTGA	120
TGGTGAAGAA GGGTACCCGG GATCCCCCT ACCACAACGT GATGCACGCC TTTTCTGTCT	180
CCCACTTCTG CTACCTGCTC TATAAGAAC C TGGAGCTCAC CAACTACCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA	60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCG CTACTCTCCC AGTGACCCAT	120
ACTTTCTCTT CCATCTCTGC TGGTTCTCTC TACTACCGAT TCTTTCTTGC TGTTCTCCTT	180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCCTCT	240
GTGTGTTTTG CATTCAAGAAC TCCCCCTCCG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCCGGCC TTCATGGCCT AAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA	60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC	120
AGGAATGCCT TTTAGTATAG TTATTTCACT TACTATTAA TAGCATATTT TAATGTATA	180
GTAAGCATTG TGTCTGTTT ATGGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG	240
GTTGCTTATA CTTGTAAATC CCAAGCACTC GAG	273

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

GAATTCCGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTGAAA ATAACATTGT	60
TTTTAGAAGA GGACAAATCC TAAAAAGTAA CATCAGACCC AAAGGTTGAG CAGAAAATTG	120
AAGTGATAACG TGAAATTGAG ATGAGTGCG ATGATGATGA TATCAATAGT TCGAAAGTAA	180
TTAACATGACCT CTTCACTGAT GTCCTAGAGG AAGGTGAAC AGATATGGAG AAGAGCCAAG	240
AGGAGATGGA TCAAGCATTA GCAGAAAGCA GCGAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

GGGAACCTGGA GGAAAACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG	60
AGGGCCAGAG GGAAACCCAG AGAGTGGCTT TGACCCACCT TAGCCTGGAC CTAGAAGAAA	120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG	180
TTCTCGCAAG AGAGCTCCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG	240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTCAGGATCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

GAATTCCGCC TTCATGGCCT ACTGTGTTGA CTTGGTGCT TGCTTGATAA GAAGGTTTTA	60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT	120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATACTATT GTGGGATACT TCTAGTTTA	180
GCACATGATA TAGGTTATGG TTAATGTTCC TTTCCATCTT CCTGGTTACT GATAATGTTG	240
CTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTGTTGCGTG TTATTTCCCT	300
GGGACCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTCAG	60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTTTTTTT TTTATCACAA CAGAAGTAAA	120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTACT CCCCCCATTT CTCACAGAGA	180
ATAACAGTCG GGAGTCATTG TCACAATATA ATAGAAATGT TAGCAACCAG ATTCAATGTAA	240

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT ACACTCCATC 300
 CTCTCTGTTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCTGGCC TTCATGGCCT AGAAAGACAT CATTAAAGTN CTTTAACAT TTAGTTGTG	60
GTCATAAGTT GACCTTTATG TGCTTCTGA ATTGGAACCTT AAAATAATCT TTAATTCAATT	120
ATTTTTCTCA CTTCTAGGCC AGTTTTGAGT TTAATATTAA TAAAAGGTTA GATAATTATA	180
GATAGGATTA TTTGCAAGTT TTGAAACAAAC ATACAAATTG TTATAGATTG CAGAGTAGGG	240
CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTTA GCCCCTCTC ATTATATAAG	300
ATCAAGCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCTGGCC TTCATGGCCT AAAAACCTTC AACTTAGAAA AACTAGCAAG GGATTGTTCA	60
CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC	120
TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAATAGCA GCAGCAAAGA	180
GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA	240
CTTTTTGGAA GCCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTAA ATAAATCAGT	60
GGTGTACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT	120
ACAATGATTCT CGCTATAGA TTTCATAATG GGGATTCTAGA GAAGTAGAGT TATGGTGCTG	180
GTTCACTGCA TTGATTGGAT CAGGCCTGG AAACCTCTCC TGATAGATT TATTCTCACC	240
TGTTGGCAA TTTCAGAAT ATTCTGCTGT AATTTACAT GTGGGCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:87:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 423 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

GAATTGGGCC	TTCATGGCCT	AGCTAGAAAA	AAAAAAAAAA	AAGCCCTTTT	CAGTTGTGC	60
ACTGTGTATG	GTCCGTGTAG	ATTGATGCAG	ATTTCTGAA	ATGAAATGTT	TGTTTAGACG	120
AGATCATACC	GGTAAAGCAG	GAATGACAAA	GCTTGCTTTT	CTGGTATGTT	CTAGGTGTAT	180
TGTGACTTTT	ACTGTTATAT	TAATTGCCAA	TATAAGTAAA	TATAGATTAT	ATATGTATAG	240
TGTTTCACAA	AGCTTAGACC	TTTACCTTCC	AGCCACCCCA	CAGTGCTTGA	TATTTCAGAG	300
TCAGTCATTG	GTTATACATG	TGTAGTTCCA	AAGCACATAA	GCTAGAAGAA	GAATATTTTC	360
TAGGAGCACT	ACCATCTGTT	TTCAACATGA	AATGCCACAC	ACATAGAACT	CCACATCTC	420
GAG						423

(2) INFORMATION FOR SEQ ID NO:88:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 172 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCTT	GGGGGGATTA	CAGTTCAACA	AGAGATTAG	60
GCAGAGACAA	ATATTCCAAA	CTATATCAAG	AATTAAGTAG	GCTTTGCTGT	CCTTTGCAG	120
CTTGAGTC	ACCCATATGA	GAGTGAATT	TCCGATCCTG	TACATACTCG	AG	172

(2) INFORMATION FOR SEQ ID NO:89:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

GAATTGGGCC	TTCATGGCCT	ACCCGTGTTG	TCCAGTATAC	CTTATAACAC	TTAGCCACTT	60
CTCCCCACCC	TCCAGAAGGG	GTCCACGTTG	AATTCTGAAT	CATCTTGAAA	ATAAGATTCC	120
AACCACAAAA	AAAATTTAGC	CATTCTTTA	CTAAAAAAA	CCAAAAAAACA	AATCTGTTT	180
ATAATCACAG	ATTTTTAGAC	AAATTTCTTG	TATCAGGAAG	AAATACAAAT	TTTGTATGT	240
TTCTCAAGCA	GTGTCTCGAG					260

(2) INFORMATION FOR SEQ ID NO:90:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GAATTCGGCC TTCATGGCCT AAACTAAGAT AAAAATAAAC AGATAGGAGA GCTGAATTCC	60
ATTTCAAGTC CTCATGTATA TGCTTACAAA GTTCCAATT AAGCTGGGA CTGGTTCTTA	120
CATGGCAGGT AATCAAACC TTTTCTATT ACTGAAGATT TTCAGCTCTC TTACAGAAAT	180
ACACAGGCTA CCATTAATAT TGTAGGGATA AATTTAAAT TGAATTGAA AATAAGAGCA	240
ACTACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GAATTGAAAC ACAGAGTTGT TCTGCTGATA GTTTGGGG A TACGTCCATC TTTTTAAGGG	60
ATTGCTTCA TCTAATTCTG GCAGGACCTC ACCAAAAGAT CCAGGCTCAT ACCTACATCA	120
GACAAAAATAT CGCCGTTGTT CCTTCTGTAC TAAAGTATTG TGTTTGCTT TGAAAACACC	180
CACTCACTTT GCAATAGCCG TGCAAGATGA ATGCAGATTA CACTGATCTT ATGTGTTACA	240
AAATTGGAGA AAGTCTCGAG	260

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC TTCATGGCCT AATTCATCT TTTTTCTG GTGCTGCATA AACATATATT	60
AAATGTTGTT ACTGATCCCT AGTACTGTG ATTTGTGACC CTTCTCTGA GGGAGACTAA	120
AGCTGCTTG GCTAAAGGCT TTTGAGACAT CCCATACGGT TCCCTGAACA AAGTTTCTC	180
TCCCTGACCTC AGTTCTCTTG ATGACCTTGG CAAGTGGGCC CGACTAGTTG GACACTAATG	240
AGGCATCGTA ACATGCCGGC CCCATCCGT CCATCTGTT CTCTTGCCA TCTAGCATTC	300
AGTGTGTTGT CTTCCCTAGTG GGCAATGAAGA CGGGTTTAAA ACCATCCACT CGAG	354

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 493 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GCTGAAAATG CAAAACATGA AGAAAGTGAT TGAGGCATT CGAGTGGAGC TGGTTCA	60
CTGGGACCAG TGCTTTATA GCCAGGAGCA GAGACAAGCT TTTGCCCTT TCTGTGCTGA	120
GGACTACACA GAAAGTCTGC TCCAGCTCA CGATGCTGAG ATTGTGCGGT TAAAAAACTA	180
CTATGAAGTT CACAAGGAAC TCTTGAAAGG TGTCCAGAAG TGGGAAGAAA CCTGGAGGCT	240
TTTCTTAGAG TTGAGGAA AAGCTTCAGA TCCAAATCGA TTACCAAACC GAGGAGGAAA	300
TCTTCTAAA GAAGAAAAAC AACGAGCCAA GCTCCAGAAA ATGTTGCCA AGCTGGAAGA	360
AGAGTTGAAG GCACGAATTG AATTGTGGGA ACAGGAACAT TCAAAGGCAT TTATGGTGA	420
TGGCAGAAA TTCATGGAGT ATGTTGCCA ACAATGGGAG ATGCATCGAT TGGAGAAAGA	480
GAGACTCCTC GAG	493

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGGCC TTCATGGCCT ACACACGGCC AAATTTGAGG GCATTCTCAC ATGTGTTCTT	60
CTCTAAAC CACTGGGGTT GACAGATCCA GGAGGCTAAA AAAAGTGAC CTCTATAATT	120
CTTTAAAGGT GCTATTTTA GAANATTGTA TAATTATTC ACAGTATATC TAAAACAGAA	180
TTAAGGACAA TAAATATATC TTATGTGACA GCCTTTATGT CTAGTCACAT TTGATGAAAT	240
AAAAAAACTTC TGAATCTGAA TAGAAGTTCT ACTGTNTCA GATTGAACTC GAG	293

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GAATTCGGCC TTCATGGCCT AAAAAGACAG GAAAATAAGT CTCTTTGTAT CCTTATTAAT	60
CATTGAAAT TATGCTATAA TATTTTTAA AACTCACCTG TTTGGTTCTG GGTGAAGCAG	120
TTCCTGAAGG AGTGTGTTGT CAGAATAATAT TGTAGGGTGA ATAGAGGGTT CTGTGCCAA	180
GTAAGTTGG GAAATAGTGG GTTAGACAAA GTTGAGTTAC TGTGGCCTT TCAGACCTT	240
GATACGCTAA TGTGCATTTT AAATCTCCAA GAAGCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG	60
GATAAAATTT ATAGGAGTA AATATAAAGT TCTACGTTT GATTTTAAAA ATCTAGGTAC	120
TGATATAGTGT GTATTAGTTG GGGTTCCCTT TTTGAAACTT AATCTTGCC ATAAAACACA	180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCCTCAT TCCTTTCCCT TCCTAATAGC	240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTGGGCC TTCATGGCCT AGGATACCTT CATTTCAGG AGCCTCTTAA CAGTAACCTGG	60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGCTCTCA TCTATAAACAG TGACAAAGAC	120
CCTGTGGAGC GTGGAATCAT TAACCTGTCTC ACAGCACAGG TGGAGTACAG TGAGGACCAG	180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGCTGCA CAAAGCACCG TGGGGTCCCTT	240
TTGCAGGCC TCAATGACAA AGACATGAAC GACTGGTTGT ATGCCTCAA CCCACTTCTA	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT	60
ATTGGGGAA ACAGATCACT GGCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG	120
ACCAAGAGTC CCGCTTGCGC CCTTTTGCTA AAAGTTCCGC ACGCCCTGCTC GGCGTGGCG	180
CAAGCATAGT GTCGTCGGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA	240
GGTAGAAGGC TCAGCTCTA GTCGCTCCC AATTACTTT TTGGTGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTGGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACCTT	60
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GCCTCTCTGT TCTGGTTCTC TCATTTATA AAGTCCTTC TTCCCTTCTG CATTATAAG	120
TAAACATGAG AAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT	180
TCCTGGGTT GGGCTTTTC ATAAGACTGA TGTTGCCAT AAAACTGGAG CCTCATAGAC	240
GATCCTGCAG GGAGGAAGCT TTCCCTGGTC ACCTGACTCA TGTGTTATA TATAGTATAG	300
AGGAGAGGTA TTCCAAAAGA CCCGTGGCTT TTCCGTGTC CCACAGCTGC CTGTAGAGTT	360
GTGGCACCAT AAACTTAGC AGCTGGAAAT CCTCGAG	397

(2) INFORMATION FOR SEQ ID NO:100:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 370 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

GAATTCCGCC AAAGAGGCCT ATTAATTTAA TAAAGCCATA TCATAACCTCT CTTAACATT	60
GTAAAGGA AACTGTGTGT GTGTATTTGT GTTAATGTTA ANTTCTCTTC ATTTTGTC	120
TTGGGGGGCT GTTTATTTGA GGATGGTCGG GGGGGGGTG GGTCAAGACCC ATCCATCCCC	180
CATGGAAGAC CAGACCCATC CATCCCCCAT GGAAGACCAT TCCCCTGTGT TCAGACTGGC	240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAAATCG	300
GCCATGGATT TGCTTGAGC AAACACCCCCG CAGTCAGGAC TTACTCCTGG AAAAGGACA	360
TCTTCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:101:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 340 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

GAAAAAAATA GACAAAACATA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA	60
ATTTTAATGC AAAATAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTAGG	120
ATTGAAATTT TAATACAATG GCCTTTGTA ACTATTTTA CTATATAGC TCAGGTGTTT	180
GAATTCTCTC TACCCCACTT ATCACCCCTA TCCCTTAACA AAGAGTCTGG CTTCATAAAT	240
ACTGTTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA	300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:102:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 370 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

GAATTCCGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG	60
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AGTGTCTGG AAATAGCTGG GAGGCCTGTG TGTAGGAG CGCCTAAAC AGTAGGATAT	120
AAGGGCAGAG AAGTAGCTGG GAACTGAGAA GAACTTGGC TGTTATTCTA GTAAGACTGA	180
AAATTCAGG TGGGATTTGA ACAGAGATGT GTGGTGATCT GACTTGGTC ATTCTGCTGT	240
GGTGAAGAGA CTGGAGGTGC GGGCAAGTA TGGAAGCATG GAGACCATA ATTATGGGG	300
GCAATGGTAG AGGAAAGAGA AACAAATGCTA TTAACTGGAG TAGGAGCACA CAGAGAACAA	360
GCCACTCGAG	370

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

GCGATTGAAT TCTAGACCTG CCTTGAGATC ACCGAGTGCT TCATCTCTGA CAGTTCTCT	60
GACCAGATGA CCACAGGCAC CAACGAGAAC GCCGACAGCA TGACATCCAT GAGCACACCC	120
TCAGAGCTG GCATCTGCG CTTTACCGCC TCACCAACCA AGCCCAGGA TGCGGACCGG	180
GGCAAAAACG TGGCTGTGCC CATCCCTCAC CGGGCCAACA AGAGTGAGTG CTCAGACCAC	240
CTCCCAGGCA GTGCCCCCCC GACTCTCGAG	270

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

GAATTTCGCCT TCATGGCCTA ATATGCTTAT GAATATGATG TTGATGGACA GCTCCAAACA	60
GTTCACCTCA ATGAAAAGAT AATGTGCGG TACAACCTACG ATCTGAATGG AAACCTCCAT	120
TTACTGAACC CAAGTAACAG TGCAGCTCTG ACACCCCTTC GCTATGACCT GCGAGACAGA	180
ATCACTCGAC TGGGTGATGT TCAATATCGG TTGGATGAAG ATGGTTCCCT ACGTCAAAGG	240
GGCACGGAAA TCTTGAATA TAGCTCCAAG GGGCTTCTAA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

GAATTCCGCC TTCATGGCCT ACTTAAATCT TAGATGCTAA TGGGAGAAAC TGATTTTTA	60
AAAAACAGGG AACTAATTA ACATTTTATC AGATATGCTA TGAAGTAAAC AGTTGAAGAC	120
TGACAGTCCA GTGGATACCG AGGAGTTCTT TTAGATACCC TGGTGAGGTA AGGACACAGG	180
CAAGGGGAGA GCTGAGACCT GAATATGAGG AGAAGCCAGG CGAGCACACA ATAGGGCAGA	240

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCTGGCC TTCATGGCCT AGAAATGGTT CTGAAAGCGA CAGTAGAGAG ATGCAGTTGT	60
GATGATTTCACAAACCTGGA TGTTTTCTT CTCCTCTTG CTTCCATTCA TCTCTGTTGG	120
CTGCTGTTGA TGGAGTCAGA CAGTAAACAC GTGGCTTGA TAACACCCAT CATCCTATGA	180
AGAAATATAGG GAGTACTTGT TCTCTGTTGA TTCAACTTTT ATGTCCTCCAG TAACATTGCG	240
CTTATGAAGG TACCTGTATT TGTATGGACT CTGAATAAAG AAGAATTCAAT TTGTTTAGCA	300
AGTATTAGTT CAGCAACCAC TGAGAAACAA GCACCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCTGGCC TTCATGGCCT ACATCATGTC AAAGAGTACT ACATAACAGTT TGGAATCTCC	60
TAAAGACCCG GTACTACCAAG CTCGTTCTT CACTCAACCT GACAAGAATT TCAGTAACAC	120
CAAAAATTAT CTGCCTCTG AAATGAAATC ATTTTCACT CCTGAAAAC CTAAAACAAC	180
CAATGTTCTA GGAGCTGTTA ACAAGCCACT TTCACTCAGCA GGCAAGCAAT CTCAGACCAA	240
ATCATCACGA ATGGAAACTG TAAGCAATGC AAGCAGCAGC TCAAATCCAA GCTCTCTGG	300
AAGAATAAAG GGGAGGCTTG ATAGTCTGA AATGGATCAC AGTGAATAATG AAGATTACAC	360
ATGTCCTTCACCTTTGCCGG GGAAAAAAAG TGACAAGAGA GACGACTCTG ATCTTGTAAAG	420
GTCTGAATCG GAGCTCGAG	439

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCTGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGAGAGGCA GGTCTAGAAT	60
TCCAAATGTA AAATTTACTA AGGCTTTCA TGTGGAAGTA GAATGCAATAT ATCTTTCTTG	120
ATATAACAAATGTA AAATTTACTA AGGCTTTCA TGTGGAAGTA GAATGCAATAT ATCTTTCTTG	180
ACTTTTTCTT TTTTGTGAG GTATAGACAG TAGAGTGATA CCGATACATG AGGAAAATGA	240
GAACCTGGAAAT GCAGGCCAA AGCTGGTCTT TTCCAGATGA ATGTAACCAA GACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

GAATTCCGCC	TTCATGGCCT	ACACTCTCAA	ATATGTCGCC	TTAACCGGAA	CCAAAGTAGG	60
AAAGCAGATA	GTGGAAAACT	TCTCTCCCAA	TCAGACCAAG	TTCACGGTGC	AAAGAACCGGA	120
CCCCGTGTCA	CGCTACCGCT	TTACCCCTCAG	CGCCAGGACG	CAGGTGGGCT	CTGGGGAAGC	180
CGTCACAGAG	GAGTCACCAG	CACCCCCGAA	TGAAGCTTAC	ACCAACAACC	AAGCAGACAT	240
CGGCCACCCAG	GGCTGGTTCA	TTGGGCTTAT	GTGCGCCATC	GCCCTCCCTGG	TGCTGATCCT	300
GCTCATCGTC	TGTTTCATCA	AGAGGAGTCG	CGGGCGCAAG	TACCCAATAC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

GAAAAAAACTG	GGTCAAAGAA	TTACGGAAAA	TGTTGGAAAA	TGAAATCTGT	TTATGTATAG	60
TTGGTAATAA	AATAGACTTG	AAAAGGAGA	GACATGTTTC	CATTCAAGAA	GCAGAGTCGT	120
ATGCAGAAC	TGTGGGAGCA	AAACATTATC	ATACTTCAGC	CAAACAGAAC	AAAGGAATTG	180
AGGAACCTT	TCTTGACCTT	TGAAAAGGA	TGATAGAAC	AGCACAACTG	GATGAGAGAG	240
CAAAGGCAA	TGGCTCTAGT	CAGCCGGGAA	CTGCAAGGCG	AGGTGTACAG	ATTATTGATG	300
ATGAACCTCA	AGCCCAGACC	AGTGGTGGAG	GGTGTGTTTC	TTCTGGATAA	CTGTTCACGC	360
CTAAGAAATT	AAAAGACAGA	ACAAAACCTG	GGATCATGTC	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

GAATTCCGCC	TTCATGGCCT	AAAAGAAAGT	ACATTAAAGC	AACTTGCATC	TCAAAACAAAT	60
ACATTCTCT	GGTGAAGTT	TTAGTAAAAA	TCGATTATT	CCTCCCTCTGA	GTTTACCCA	120
ATGGGTAAAG	TTGTCTAAAT	ATGGGATTCC	TTAGAAATCCA	TCCCTCTTC	CAAGCATTTC	180
CCCATGTTTC	CTTCCACCCC	CAAATTCTCA	CCCCATTICA	GGCAGAGCTG	AGCAAAACATA	240
AGCCTTCTCT	GAAGTATTGA	GGGAAAGTCT	GCTAAACCGG	TAAACTACTT	AAGGAGCTAA	300
CAGAAAAGGT	TGTATCAGAG	AAACAGTGA	GAAACACAGG	TTTCTAAATTA	TATCTGGCAC	360
TGGAGAGAAT	GTCAAAGTA	TTGGCCCGAGC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC	60
TGGAAGAAGT AAGAGTGTTC ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT	120
TGATCCCCTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGCCCG GGGTCCCTTT	180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATAACCC	240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

GAATTCGGCC TTCATGGCCT AACGCATGCTG TCTTGTGATG GTGATTCAT GTGTTTCTG	60
CATGGGATTA TTAACGGCAT CCATTTCCTT GGGCGTCAAAG TTGTTGCAGG TGTCCACCAT	120
TGCGATGCGAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTACAGA	180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT	240
AAGTTTCAGCC CATAACAGCA GTCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

GAATTGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAAATA AAGAGAAAGA	60
TAATTCACTT CCTTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTGTG TTCACTCCA	120
CTACATACCT TACGATCTCT TTTGCTTGC TTTTTTCAG TCAAGTCTCT ATTATGAGG	180
TGGACAAAGCA AGATTGTCGC AAATTTGCA CTACTGGCAT CGATGGAGCC ATGACAATT	240
GGGATTTCAA GACCCTCGAG	260

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCCGGCC TTCATGGCCT AACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGGAGCT	60
GTTTCTAGGA GGGAAATAAA TAATTGGCA GGAGACTTT TGAACTAGAT ATCTATTGAA	120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCCATTTC CCAATTTCAC TTCTCGTCCC	180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC	240
AGACCCAGTC ACCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 238 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

GAATTCCGGCC TTCATGGCCT AATTACATTT ATGCAACAA GCTATCAAAA GGACTGGCTG	60
TCCTTGGAA TGAAACGTA CAAAATCGTC AATAGAGTAT TATTGGAAAA GATTGTTTC	120
AGTCATGAAC TAGCTATTAA AATGAGAAAA CAAATGTAAT GATGTTTCT GTCATGATTT	180
TATAAATAAA TGTCATTGAG AGGAAATTGG AAAAATAAT GAAAAAGAAA AACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

GAATTCCGGCC AAAGAGGCCT ACCCTAGACC TGTTTCTGT TCTCTACTCT TGAAATGCTA	60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGCGT TGACAGGCAT CTCTCACTCA	120
CTGTGCTGCA ACTCAACTCT TTATCTTCA CCAAACAGGG CCTCCCCGCA GCTTITCCAC	180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTAGACCCCCGGA ATTATATCTT	240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCACTCA	279

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 656 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

GAATTCTGGCC	AAAGAGGCCT	AGTTATAATG	ATGGAAGAAG	TGGAAAAACT	TTGTGATCGG	60
CTTGAACCTGG	CAAGCTTACA	GTGCTTGAAT	GAAACACTCA	CATCATGCAC	AAAAGAAATAG	120
GAAAGGCTGC	TTTGGAAAAA	CAGATAGAAG	AAATAATGA	GCAAATCAGA	AAAGAGAAAG	180
AGGAAGCTGA	GGCTCGTATG	CGACAAGCAT	CTAAGAACAC	AGAGAAATCA	ACTGGTGGAG	240
GTGGAAATGG	AAGTAAAAAT	TGGTCAGAAG	ATGATCTACA	ATTACTAATT	AAAGCTGTGA	300
ATCTGTTCCC	TGCTGGAAACA	AATTCAAGAT	GGGAAGTTAT	TGCTAATTAC	ATGAACATAC	360
ATTCTTCCTC	TGGAGTCAAA	AGAACTGCCA	AAGATGTTNT	TGGCAAAGCA	AAGAGTCTCC	420
AAAAACTTGA	CCCTCATCAA	ANAGATGACA	TAATAATAAA	GGCATTGTAT	AAAGTTCAANA	480
AGAAACATGG	AGTGGTACCT	CAAGCAGACA	ACGCAACGCC	TTCAGAACGA	TTTGAAAGTC	540
CATATACAGA	CTTCACCCCT	TGGACAACAG	AAGAACAGAA	GCTTTGGAA	CAAGNTTTGA	600
AAACATACCC	AGTAAATACA	CCTGAAAGNT	GGGAAAANAT	ACGAGAAAGT	CTCGAG	656

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

GAATTCTGGCC	AAAGAGCACAAAT	AGGTGATACT	GAATTCTATA	CTGTTTCTA	60
CTTTTCCATT	AAAACATTGG	CACCTCAATG	ATAAAAGAAAT	TTAARGTATA	120
TAAAAAATAA	TTTCAGCTTC	ATTTCTGATT	TCGAANCAAT	CTANACTGTT	180
TATGTCTGAA	CCTGTAATTC	TTAAAANACT	TCTTAATCTT	CTAGAAGAAA	240
GAGCTCTCTC	TAGAAGTCCA	AAATGGCTAG	CCATTATGCT	TCTTGAAAG	300
TGGGACCAAG	ATGTTTTTTT	GGAGTACCAA	GCAAGGGAA	TGGAGCACTT	360
TGTTAGTAAC	ATGAATTGGA	AATCTGTGTC	GAGTACCTCT	GATCTAAACG	420
CTGCCCTGGAG	AGCAGCTGTA	CCTAACATA	CTGTAATGTA	CATTACACATT	480
AATTTCAGGC	AGGTGTAAACA	GTTCTTTCC	ACCAGATCTC	GAG	523

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCTGGCC	AAAGAGGCCT	AATTCTTCC	TGTGATATGA	GAATTCTTT	TCTTCAGCA	60
GCTTTACCTG	CATTGGCTT	TGGCTTTGC	AATCGGGCCC	TCATTCTCGA	G	111

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCCGCC	AAAGAGGCC	AACCGCGGCC	GCTACTTCGG	CCTCTTGGG	AAAAAAAAAG	60
TGAAAAGAAA	NATCACAATA	CAGGGAAAAG	TGAGCTAAAAA	ATCCCAGCAT	AAAAAAGCCC	120
TTGATGTGGT	CCTGAATCGG	CTATTTCTAT	CTGTTCCCTG	AGCCTAACCT	CAGCGCTGGC	180
CTCTCTAAAC	CTCTTTTCAG	TCCTCTCAT	TTGAAAACAG	GGCCCAATTAC	ACATTCCTG	240
AAAGCTTGCT	GAGTGATTAA	ACCACATAGT	CTAGGGGAGG	CACTCATCAA	ACATAAGGCC	300
TCTCTTTTG	ATTTTATCC	TATAGTGGTA	TCTATCTAGA	GGCTGGTGA	GACAGTGTGG	360
TGGAAGGAAA	GTGGGAAGGA	TACACTGAAA	TAGGACATAG	ACGTAGAGGG	GAGTCGATGG	420
TCATCTGGCT	TGATAGGAA	AGTTAGAGAG	CTCTCTGAA	CCACAGTTAC	AGAGCTTGGG	480
ATTATAACAC	ACACAGCCC	AGAGAAAACA	CTTTCTTAC	CATATTCCT	CTTCTGCTGG	540
GGCTCTGGCA	CCTTAATTGG	TCAAAAGGC	GCACACTGAG			579

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCTAGG	AATGGGTCGG	GAAGTTGAGA	ATCTTATATT	AGAAAATACA	CAACTGTTGG	60
AAACCAAAA	TGCTTTGAAAC	ATAGTGAAGA	ATGATTGAT	AGCAAAAGTG	GATGAACTGA	120
CCTGTGAGAA	AGATGTGCTG	CAAGGGAAAT	TGGAGGCTGT	GAAGCAAGCC	AAACTGAAAC	180
TAGAGGAAA	GAACAGAGAA	TTGGAGGAAG	AGCTTAGGAA	AGCTCGGGCA	GAAGCTGAAG	240
ATGCAAGGCA	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCCCTGT	AACTCGGAAA	AGATATCAGA	GGAAATGTTCG	TGGCATCAGA	GAGAAAGATG	60
AGAGCTCACC	AGGTGCTCAC	CTTCCTCCTG	CTCTTTCGTG	ATCACCTCGG	TGGCCTCTGA	120
AAACGCCAGC	ACATCCCGAG	GCTGTGGGCT	GGACCTCCCTC	CCTCAGTAGC	TGTCCTCTGTG	180
CGACCTGGAC	GCCATCTGGG	GCATTGTGGT	GGAGGGCGGTG	GCCGGGGCGG	GCGCCCTGAT	240
CACACTGCTC	CTGATGCTCA	TCCTCCTGGT	GGGGCTGCC	TTCATCAAGG	AGAAGGAGAA	300
GAAGAGCCCT	GTGGGCTCTCC	ACTTTCTGTT	CCTCCTGGGG	ACCCCTGGGCC	TCTTTGGGCT	360
GACGTTTGCC	TTCATCATCC	AGGAGGACGA	GACCACATCTGC	TCTGTCGGCC	GGTCACCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCTAGA CCTGCCTCGA GAAAATGAAA GTCTTTCTC AAAAAACTTC TTCCCAGGTC	60
TGTGAAGCAG CACAGTGGCC CCTTCTGGCT CTCACCTTGT ACCTCGTCCT TGTTTGCCCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT	60
GGAGGTGAAA ATATTCAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC	120
AACACCACAT GCCACTGAAC TATATAAAC TTTATGTCAG AACACTTAAT TGTGTCAATAT	180
GTAACCCCTCT TGCAAATAAT ATTCCCTTAC TACAGATCTG TCCCACGTGT CTCAGAAAAT	240
AAAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC	60
AATGAATACG CAATTAGAAC TTTCAGAAC ACTTAAATT CAGAACAACT CTGAAGATAA	120
TGTTAAAAAA CTACAAGAAC AGATTGAGAA ATTAGGCCA GGCTTTGAGG AGCAAATTTC	180
ATATCTGCAA AAGCAATTAG ACGCTTACAC TGATGAAAAG AAGGAAACAG TTACTCAACT	240
CCAAATATC ATTGAGGCTA ATTCTCACCA TTACCAAAAA AATATTAATA GTTGCAGGA	300
AGAGCTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT	360
TGAAGCATCA GCTAAGAAC ATGAAGCAGA GATAATAAG TTGAACGAGC TAAAAGAGAA	420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT	480
AGAAAATTAA AGGAAAGCCA CCCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCTGGCC	TTCATGGCCT	AGCGGCAGTC	CAGATCACGG	TTACTGTGAC	CTGACTGGAG	60
AAAAATTATG	TGCTCTGCAAT	GATACTTGGC	AAGGTCTGTA	TTGTTCTTTG	AATGTTCCCT	120
CTACTGAGTC	TTACTGGATT	CTGCCAACG	TTAAACCCCTT	CAGTCCTTCT	GTAGGTGGG	180
CTTCACATAA	AGCAGTTTA	CACGGGAAT	TTATGTGGGT	GATTGGTGGA	TATACCTTTA	240
ACTACAGTTC	TTTCAAAATG	GTCTCAAATG	ACAATTAGA	AAGCAGTATA	TGGAATGTAG	300
GAACTCCATC	AAGGGGACCT	CTCCAGAGAT	ATGGACACTC	TCTTGCTTTA	TATCAGGAAA	360
ACATCTTAT	GTATGGAGGC	CCCCAACGGC	CCGACCCCTC	CCCCAAAGGG	GCAGTCCCT	420
TCTTGCAAGGT	CTCAGCTTGC	GGGGTGGGGG	GAGTCATGCC	CAGGGGAGGA	GACTTTTAT	480
CTGGAGGGGA	GAGAAGGATT	CTAGGGGTGT	GGAGTGGAG	AAAGAGGCTT	CCTTGAGCCA	540
CCCTTCCCAC	CCCAGCCCTT	GNTGGTCCCT	AGGCCAACGG	ACCAAGTGA	ACCTTCCAGG	600
ATACTAGCCC	GCCAGCTGTC	GGCCCCAGAA	AGCCAGCTG	CCTTTTAGCA	CTTGGATACCA	660
CACAGACCCA	CGGAGCTCTC	TGTGTTGGC	CTCTCACACA	CACACAACTC	GAG	713

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

GAATTCTGGCC	AAAGAGGCCT	AAGAGATTCA	GGACCTGCAG	AGTCGCCAGA	AGCATGAAAT	60
TGAATCTTTG	TATACTAAAC	TGGGCAAGGT	TCCCCCTGCT	GTCATTATTC	CCCCAGCTGC	120
TCCCTCTGCG	GGGAGAAGAA	GGAGACCCAC	TAAGAACAAA	GGCAGCAAGT	CTAGTCGAG	180
CAGCTCATTG	GGCAATAAAA	GCCCCACAGCT	TTCAGGCAAC	CTGTCGGTC	AGAGTGGAAC	240
TTCAGTCCTTA	CACCCCAAC	AGACCTCCAC	AGTCGAG			277

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

GAATTCTGGCC	TTCATGGCCT	AAGGCTACCG	ATATTGGAGA	AGCTAACTAT	GGGTTTTACC	60
ACACGTAAACA	GCTTTTTGGT	GAATACGTT	TTATACGAA	TAAGCTTTCC	TCTAATTGAT	120
TTGAGTTTTG	GTTCCTCTGTC	GGGTTTGTC	TCTTTGTTT	TCTTGTTTT		180
AGTAAATTGG	TTTTCTCTCA	ATGTATTTC	TTAAAGTAGT	CTAGCTTTAC	CCAGTTTCCT	240
TGGCAAAATTG	AAATTTAGGC	CATGAAGGCC	GAATTGGCC	TTCAATGGCT	ACTCAGCCTC	300
CCCAAGTAGC	TGGGACTACA	GCGTGTGCC	ACTATTCTCA	GCTGATTTT	GTATTTTAG	360
TGGAGACGGG	TTTTTGCCAT	TTAGTTGGC	CAGGATGGTC	TCTCTCTCGA	CGTCGTGATC	420
CGCCCGCCTC	GGCCTCCCAA	ATTGCTGTGA	TGACAGGCCT	GAGCCACCCC	GCNTGGCNG	480
TCCCTACCTCT	TTTTTAAGAC	CTCTCCCTGT	AAGCACTGGA	TAATCTACTT	CTAGTAATGT	540
GAAACTGACT	ATATNTGAA	TTCATATGTT	TTCAATCAAC	CTGTTGCAGT	TTATATTCA	600
CACCCCTGCTC	CCTTTTGACA	GTTTAAGTAC	AGATAGTCTC	AGCAGTTCTG	GAGACCATGT	660
AAAGCTCGAG						670

(2) INFORMATION FOR SEQ ID NO:130:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

GAATTCTGGCC	TTCATGGCCT	ACGACTCTGC	TCTATTTACC	ACTATCAGGC	CAATCCTCCT	60
GACATGCTGT	TAATATTTAG	AAATATTCTT	CCAACATTCA	GAGTGCCTGG	GTACCAACACA	120
TGGATCGGAC	TAAGATTCTT	AAGTCTCGTT	TCTAAGAGCT	TCTTCAATGT	CTCCAACATAT	180
CTTTTCAGGC	TCATGTTTGA	GACCTTCCTT	TCAAGAATAA	TTTGCTTGTG	ATCTGGTTCA	240
AGCTGAACAG	AGATTTTCAG	ATGACTCCCCA	AACTATCTGC	AACACATCAG	CCGTATTAAC	300
TCTTCTCAGA	ATGCTCATAC	AGAAGCCATG	CCAGTGCACA	AAAGCCACTT	CTGACACCTG	360
GCCCCTGTCTG	ACTCATGGAT	TTCTTCCAGG	ATTGCTCTTT	CTATCTGCTT	TAACACCTCCT	420
TGTCAATTGA	CTTTCTTGG	CTCCCAACCC	ACTTTACTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 535 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCTGGCC	TTCGTGGCCT	ANATATTCTA	AGCATTCAAT	TTGTCAGTTT	CTGAGATTTT	60
CTTTCCATCT	TAGTTTTTA	GAAGTCAGAA	AATGACTTTT	CACATTCACT	TAGGGTATAT	120
AACAATGTTA	ACGTAAGTTT	ATGAGCTGAG	TAGGTAGTTA	ATAAACATCC	TTTTAAGTTG	180
TAATGCTTTG	AAATAGCATA	TTAAAGGGTT	GCAAGGGAAA	ATTGGAACAT	CAGTGTGAGT	240
TATTTTACAG	TCATTTGTAG	GTCTGTTTGT	GACCTTGGCC	TTTCACACT	TGTTTGTCTA	300
TCACCTTTAG	TATATTACTC	TTTGGCACAG	GTTGCTTAAT	CACATTAATT	TTTGCATCAA	360
AAATCCCTTG	GTTTAGTGT	TCTTAATGAT	GTTCATTTTG	GAAAGTCATG	GACCTGAATT	420
CTTTGAGTAG	TTCATGAAA	CCATATACTT	TTCCAGAGA	AATGGGGTGC	ATATAATTTC	480
AGGAAGTTCA	AGGTAGGGAA	AACAGCTAA	AAATCCCAAC	TTATTCATC	TCGAG	535

(2) INFORMATION FOR SEQ ID NO:132:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

GAATTCTGGCC	TTCATGGCCT	AAGGGGATCA	TCAAAGATGT	TGGACACCTT	GTGTTCAAAT	60
CTTGGTTCA	GTGCGGCCCTG	TCCAGATCGG	CTTTTGGTT	TGGTGTCTT	GGCCTGGATA	120
CCAGTGGAGA	AGATGTCA	CATATCATCA	TCAAATAG	ACTTGGTTTC	CACTTTCTTT	180
TTGGACTTTT	CTTTTGGTTT	TACAGTTAAG	TCAGCAAAGA	TATCAATGTT	ATCATCAAAT	240

AAATTAGATT CCAATGTTT CTCCCTCTCT CGGGTTTCT GAGAGGGTTT AATTGCTTCC	300
GTAGCAAATA TATCATCCTC AAAATATCT TGTGTGTTA ATATGACATC CTGCTGACTA	360
CTGGATTTG TCTCATTCTT CTTGACTTC TGATCCTCGA G	401

(2) INFORMATION FOR SEQ ID NO:133:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCCGCC TTCATGGCCT AGTAGATGAA CTAGAACGAT GATAAACGAA GATAGATAAA	60
ATGAAAGAAA ACAAAAGTCA AGGAGAACTC AGGCGTCAA GAGTGTGTAACAAACTCTG	120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTT CCCTTCCTCT	180
GTTGATTTTT TATAGTTGTC TTTTATTTA AACACGCCTC CCCCCCCCCT TTTTAAACTG	240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAAT AGCTGCTTCT TACCTCCCTT	300
GGATCTGGAA CTTAAATATA AACAGTGTATA TAAGTAAATA GTAAGTAGAC CGTGAATTAA	360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCCTTTTTG CTGGATTTCA	420
AGTCGTAAG CATTGGAGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA	480
GTGATGCATG GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:134:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCCGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGCAGTC AAACCTGGAAC	60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCCTGCTTCT	120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCCTA TATTCAGAAA CTCAGGAATG	180
GCAGGCAATT GTTCTGGGG ATATATTCTT AATGAAAGTGC TAGACTATCC ATTACTTAA	240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTCCCAT TTATAATGGA AATGAAAATT	300
CTTAACTAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:135:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCCGCC TTCATGGCCT ACCCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG	60
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CATCTTCTGT CACTGCTGGA GTTGCCAGTT CACTCTCAGA AAAAATAGCC GACAGCATTG GAAATAACCG GCAAATGC A CCATTGACTT CCATTCAAAT TCGTTTTATT CAGAACATGA TACAGGAAAC GTGGATGAC TTAGAGAAAG CATGCCATAG GGACATTGTG AATTGCAAG TGGAGATGAT TAAACAGTTT CATATGCAAC TGAATGAAAT GCATTCTTG CTGGAAAGAT ACTCAGTCAA TGAAGGTTA GTGGCTGAAA TTGAAAGACT ACCAGAAGAA AACAAAAGAT TATGGGCCCA CCTCGAG	120 180 240 300 360 377
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(2) INFORMATION FOR SEQ ID NO:136:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 333 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAAATTGGCC TTCATGGCCT AAGCAAACCT CATGCAGCTG GTGGAAC TAG ATGTGTCTG AAATGAGATT CCTGAAATTG CAGAAAGCAT TTCATTCTGT AAAGCACTGC AGGTAGCTGA CTTCAGCGGA AACCCACTGA CTAGGTTGCC AGAAAGCTTT CCTGAATTAC AGAATTAAAC ATGTCCTTCT GTAAATGACA TCTCACTACA GTCTCTACCT GAAAATATTG GCAATCTTA TAACCTGGCT TCACTGGAAC TGAGAGAGAA TCTTCTTACA TATCTTCCTG ACTCTCTTAC CCAGCTGCGA AGACTAGAAG AACTTGACTC GAG	60 120 180 240 300 333
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(2) INFORMATION FOR SEQ ID NO:137:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTGGCC AATGAAGCCT ACTTTAGTAT TTTGGCACTT CCTAATTGAC ACCTTGGGAG ACTGCAGGAA GGGAACGAGA ATCATNNNTA GGNTATTGT GTGTGTGTGT GGTTTTTTTT TTTTTTGGGA AGACAGAGTC TCACACTTT CCCAGGCTG GAGTGCAGTG GCGTGATCTC GGCTCACTGC AACCTCTGCC TCCAGGGTTC AAGCGATTCT CTTGCCTCAG CTTCCCGAGT AGCTGGGATT ACAGGCACAC GCCACAAACGC CTGGCTAATT TTTATATTGT TAGTAGAGAC AGTCTCGAG	60 120 180 240 300 309
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(2) INFORMATION FOR SEQ ID NO:138:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 599 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTGGCC AAAGAGGCCT AAACTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG ACTTCAGAAG ACATTTCTC AACCTGAGTC CCTTCACCAT TACTGTGGTC TTACTCTCA	60 120
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GTGCCTGTTT	TGTCACCAGT	TCTCTGGAG	GAACAGACAA	GGAGGCTGAGG	CTAGTGGATG	180
GTGAAAACAA	GTGTAGCGGG	AGAGTCAAAG	TGAAAGTCCA	GGAGGGATGG	GAACGGGTGT	240
GTAATAATGG	CTGGAGCATG	GAAGCGGTCT	CTGTGATTG	TAACCAGCTG	GGATGTCAA	300
CTGCTATCAA	AGCCCGTGG	TGGGCTAATT	CCAGTGCAGG	TTCCTGGACGC	ATTGGATGG	360
ATCATGTTTC	TTGTCGTGG	AATGAGTCAG	CTCTTGAAA	TTGCAAACAT	GATGGATGGG	420
GAAAGCATT	TTGCAATCAC	AATGAAGATG	CTGGCGTGAC	ATGGTCTGAT	GGATCAGATC	480
TGGAGCTAAG	ACTTAGAGCT	GGAGGCAGCC	GCTGTGCTGG	GACAGTTGAG	GTGGAGATTC	540
AGAGACTGTT	AGGGAAAGGTG	TGTGACAGAG	GCTGGGACT	GAAGAAAGCT	GAACTCGAG	599

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCCGGCC	TTCATGGCCT	AACCTTCCTG	AATATCTGCC	GTTTGTCTG	CAAGAAATAA	60
CTACTCAACC	CAAAAGGCAG	TATCTTTAC	TTCATTCCTT	GAAGGAAATT	ATTAGCTCTG	120
CATCAGTGGT	GGGCCTTAAA	CCATATGTTG	AAAACATCTG	GGCCTTATTA	CTAAAGCACT	180
GTGAGTGTGC	AGAGGAAGGA	ACCAGAAATG	TTGTTGCTGA	ATGTCTAGGA	AAACTCACTC	240
TAATTGATCC	AGAAAACCTC	CTTCCACGGC	TTAAGGGGTG	CTTGATATCA	GGCTCATCAT	300
ATGCCCCGAAAG	CTCAGTGGTT	ACGGCTGTGA	AATTCTAACAT	TTCAGGACAT	CCACAACCTA	360
TTGATCCACT	GTAAAGAAC	TGCACTAGTG	ATTTCCTAAA	AACTTTGGAA	GACCCAGATT	420
TGAATGTGAG	AAGAGTAGCC	TTGGTCACAT	TTAATTTCAGC	AGCACACATAAC	AAGCCATCAT	480
TAATAAGGGGA	TCTATTGGAT	ACTGTTCTTC	CACATTTTA	CAATGAAACA	AAAGTCTCGA	540
G						599

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

CTTCATGGCC	TAGTGGTTCT	TCTGAAATCG	GCCTTCAGAC	ACCTGTCTTT	GGTAGTACCA	60
ATATCTAAGA	AGTGGTTTCA	GTTCATTTT	GTTTCTCTCC	ATGCCAGAGA	GAAGGCCACAG	120
TTTCCCTAAGC	TGGGGAGGAG	GTATATCCTT	CAAGAGATCG	GCTTGTAGA	ATAGACCACT	180
TAACACCCATA	TGAAAAAGAC	ACAGACTGAA	ACATGGATGT	CCTCAAGAAG	GGCTGCTGAC	240
ACCTATGATT	TGGCAAGGAG	ATAAATAACA	GAATGTGCAA	AGGGTCATAA	GAGTGCAGAC	300
ACCCCTAATGT	CTGTTGGCTG	GAAGGTCAGA	GCAGTTCAC	AGTAAAATG	GGTACGCCAT	360
GAAGGCCGGC	CTTCATGGCC	TATAGGCCAT	GAAGGCCGAA	TTC		403

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTGGCC	TTCATGGCCT	AGTCCTCATC	TGCTGGCATT	TTGTGGGTG	TTAGTGC	60
ACTTGAATAG	GGGCTGGGT	GCTGCTTCC	ACTGACACCC	AAATCCAGAA	TCCCTGGTCT	120
TGAGTCCCCA	GAACCTTGCC	TCTTGACTGT	CCCTTCTCTT	CCTACCTCCA	TCCATGGAAA	180
ATTAGTTATT	TTCTGATCCT	TTCCCCTGCC	TGGTCTAGCT	CCTCTCCAAA	CAGCCATGCC	240
CTCCAAATGC	TAGAGACCTG	GGCCCTGAAC	CCTGTAGACA	GATGCCCTCA	GAATTGGGGC	300
ATGGGAGGGG	GGCTGGGGG	CCCCATGATT	CAGCCACGGA	CTCCAAATGCC	CAGCTCCCT	360
CCCCAAACAA	ATCCCGACAA	TCCCTTATCC	CTACCCCAAC	CCTTGCGGC	TCTGTACACA	420
TTTTTAAACC	TGGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GCGATTGAAT	TCTAGACCTG	TGTGTCTAGC	TGTGATGGAA	TCTGAAATGA	AGTTTGACAA	60
GGACCATGAT	GGACTCATTG	AAAATGAGG	CTATGCAGAC	CAGACCTATG	ATGGATGGGT	120
GACCACAGGC	CCCAGTGCTT	ACTGTGGAGG	GCTGTGGCTG	GCAGCTGTGG	CTGTGATGGT	180
CCAGATGGCT	GCTCTGTGTG	GGGCACAGGA	CATCCAGGAT	AAGTTTTCTT	CTATCCTCAG	240
CCGGGGCCAA	GAAGCCTATG	AGAGACTGCT	GTGGAATGGC	CGCTTACTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTGGCC	TTCATGGCCT	AGGGAGGCTG	AGGTGGGAGG	CTCACTGGAG	GCCAGGAGTT	60
CGGAACCAAGC	CTGAGCAACA	TAGGGAGACC	TCAGCTCTAC	AACTGAAAAAA	AAGATAGCCA	120
GGTGTGTTCA	TGGTGGCACC	TGTCTGTATT	CCAGCGCTT	GGGAGGCTGA	GGCAGGAGGT	180
TTGCTTGAGT	CCAGGAGTTT	GAGGTTGCCG	TGAGCTACAC	AATGAGCTAT	GGTGGCACTA	240
CTACACTCCA	GCCTGGGCCA	TAGAGTAAGG	CCCTGTCTCT	AACTGGAAGT	CCAAAGAGGG	300
ATCTACTTCC	TAGACTATTAA	ATTTAATAGA	TCAATAAATT	AATCAAGAAC	ATGATTTTT	360
TCTCATCTTT	CTCTGTAGTC	ATATTTATA	CAGACTTTT	GTAAAGTAA	TCTCTCTTTA	420
TGGGCAGACA	ATGATTTCA	AAACACCCG	CCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

GAATTCTGGCC	TTCATGGCCT	AGTCAGCCGT	GACTGCACCA	CCATACTCCA	GCCTGGGTGA	60
CAGAGCGAGA	TCTTGCTTA	AAACAAAACA	AAACAAAACC	CAGACTTCCT	ATAATTCTCA	120
AAAAATAATG	TGGGTTGAG	AGGCCTACCT	TGAAATGTAC	AAGATCCTGG	CCAGACTTC	180
CCTATCTAAC	AATATGCTAG	TAACATTTG	TTGACATGTC	TTAAAGAAAT	GTCATCAGG	240
GCCTCAGAAA	GCAAGGCAGA	GAACAGGTCC	CTGAAATTAA	CTAGCTTGCA	CCAAACCATC	300
AGATAAAGAT	AGGTTAATAT	TTGACAGAAA	AAACTCTTCA	AAAAGAGACA	GTGAAATACT	360
CTTCAGATGA	ATCCAGGCCG	CTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCTGGCC	TTCATGGCCT	AGGCAGTGGGA	GGCCTCTGTA	ATTCTAGCAT	ACAGGTGGCA	60
AGTTATTACA	TTATTTCTT	CCCTCTGTCT	ACCTGCAGTT	GGTTTTATGT	GGGGCGTTAG	120
TACACCTCCC	AAAGGGCTTG	CCCGCAGGTG	AGAGGTGCAC	ATTGAACTCC	CTCACCGAGC	180
AGATGGGAAG	TGTGGCCATG	AGAGAGAGCT	TCAGGGGCC	TGGGTTATG	ACATCGCTGG	240
GCCAGGAATG	AGGTTAATAT	TTTTAATGGC	GAAGGGTGAG	CCCCTTATT	ACCCGAGCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCTGGCC	TTCATGGCCT	ACTGGATGGC	ATCTACTTCG	TATGACTATT	GCAGAGTGCC	60
CATGGAAGAC	GGGGATAAGC	GCTGTAAGCT	TCTGCTGGGG	ATAGGAATTC	TGGTGCTCCT	120
GATCATCGTG	ATTCTGGGG	TGCCCTTGAT	TATCTTCACC	ATCAAGGCCA	ACACCGAGGC	180
CTGCCGGGAC	GGCCTTCGGG	CAGTGATGGA	GTGTGCGAAT	GTCAACCCATC	TCCTGCAACAA	240
AGAGCTGACC	GAGGCCAGA	AGGGCTTCA	GGATGTGGAG	GCCCAGGCCG	CCACCTGCAA	300
CCACACTGTG	ATGGCCCTAA	TGGCTCCCT	GGATGAGAG	AAGGCCAAG	GACAAAAGAA	360
AGTGGAACAA	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

GAATTCCGGCC	TTCATGGCCT	AATGGAAAGG	ACAAGGAAAA	GGGAGAAGGG	GTGAGAGTCT	60
GTCCCTAGGGG	CCAAACGAGAA	CAGTGAGCTG	TTTCAGGGG	GCCATTTCCT	TGTCCATGCT	120
CACAAGCCTG	TGGATTCTTC	CCCCTCTGCA	GGAAATTACC	TGATGTTCCA	AACCCCCCTCC	180
AGATCCCTGTA	TATCCGCAGC	ATCTCCCTT	TCCCTGACT	GGAACAGTTT	CTACAGGACA	240
CTATCAAGAG	GTACTAGGGG	CCTGGAGGTT	TGGGAGCTAA	GAGAAGCTTG	ACAGAGCCCA	300
CGCCCGACCC	CTACTTCTGT	TTCTTCTCAA	GGTATAATCT	GCAGATGTTG	GAAGCTGAGG	360
CGACGCATGAA	GCAGGCCCTG	GGTGAACCTGC	AGGCACAGCA	GCCCCCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

GCCTGGCCAT	CCGGAGAGCT	AAGAACCTCA	GGCGGCTGCT	GTACGTNTCA	TGCAACCCCC	60
GGGCAGCCAT	GGGCAACTTT	GTGGACCTCT	GCAGAGCCCC	ATCTAACCGG	GTAAGGGCA	120
TTCCCTTCCG	GCCGGTCAAG	GCTGTGGCAG	TGGACCTGTT	CCCGCAGACC	CCTTCTTTTT	180
TCATACTTAT	ATGAAAGACT	ACATACTTAA	AATACTGGTG	ATTATATTAA	GGACCTGAAA	240
TCATAAAGATT	GTGGTCTTGC	TTTTTACTTA	TTTTTGTATC	TTAGCGATGT	CTAGAGTTAA	300
TAAGTGTTCG	TTTTCTAAC	ACAGCAAATC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

GGATTCCGGCC	TTCATGGCCT	AGTGGGGCAC	TAGGATCATC	ATTTGGGTGA	GAGCCCTCGG	60
CAATGGTGG	GAGGGAGAAG	TTATCATTGT	GGAGCTCAGA	TGGGTCCGG	ATTGGTGTGG	120
TCCTACGAG	CTTGGTATTC	TCCGCTTGA	GCAGGTAGAG	CTTCTTGGCA	AAGAACACCG	180
TCATCATGAA	GAGCAGGAGC	AGGACGAGGG	CAGCCGAGCC	CACGCCACG	CACATCACCT	240
GGAAGTCGGT	GATGATGGAC	TCGCAGCGCA	TCCCCTGTG	CCAGATGTAG	TCCTGGGTGT	300
TGCACCTGCA	GAAGGCCCT	ATGTTCTCCA	CCAGGTAGCA	CTGGCCGCCA	TTGTGACAGT	360
AACTTGGGAA	GAGGTGCGAC	ACTGACCGGC	AGGAGCCGTT	ATGCCGCACA	AAGCCACTGC	420
GGCACTCAGT	GCCATTTCA	CTGGAGGCCA	AGTCCCTGCC	TGGCTCTCCT	TAGGCCATGA	480
AG						482

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

GTTCCCTTAATG AACTTTAACAT GCCACAAACAT TTAGCGAAA GGGGGGCAAT CATTGGTGGT	60
TTGGCATTCG CAGAGACTTC TGTCAGTT TCAGTCAAAT TTTCCCATTT TTAAGAGAAT	120
ATGGGAACAT TTCATATGAT TCACATCACG AAGATAGTGA AGATGCTGAA GAAACATCAG	180
TTCCAGAACG TCCGAAATT GCTCCAAAT TTGGAAGAGA GGCCAGAGTA GTTATAACCC	240
AGAGCCCTGG GAAATACGTT CCCCCCTCT CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

GCTCGCCAC TTTATGAAGA GCGATTTCAC GGCTGCTTGA ACCATTCGAA TTTGGATTTG	60
TGTTCAAGCAC TTTAAAGGT TCAACTTTT GCTCTACCC AGATTGGTCT CAGGTCTGTC	120
TTCTCCAGAT GACCGGTGGT TTCTTGAGCT GCATCTGGG CTTGGTGCTG CCCCTGGCCT	180
ATGGCTTCCA GCCTGACCTG GTGCTGGTGG CGCTGGGCC TGGCCATGGC CTGCAGGGCC	240
CCCACGCTGC ACTCCTGGCT ACAATACTCG AG	272

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCCGGCC TTCATGGCT AGGGGCGGTG AAACGTCTG AAGAGCGTCC AGCTCGTGGC	60
CGAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA	120
ACGGCCCGCG TTCTGGACGG CCTGGGGGA GGAGGGCCCG ACAGGGGGAG CTTCAAGGA	180
CAACTGGGGC TTCTCGACGT CCACCCCTTT CAGGGCGCGG CCCCGGTAGC CCTCGGGCCG	240
GCCCAAGGTAC AGGAGGTGCT TCCCGGGACC CCCGGACTAC CTGGAGGGAC CTCCCGAGGG	300
GACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCCGCC	TTCATGGCCT	ACAATCCAA	ATGTAAGGATC	ATGCCCATTG	CCCTAAGCCC	60
AGGCATGAGA	GTCGACATCT	CTCCTCTTAT	ATACAGATCC	AGTCCACAGG	TGAAGTGGGA	120
ACTCTCAAC	CAGGATTCAAG	CACACCATTC	ATGTTGGCAG	TCCTCTACTG	GAACACAGCT	180
TGGAGAAGGG	ATTGGGGCTC	TCATGGCAGG	ATGCAATCCA	CTGTTGAGAT	TGTGACTCAT	240
GCACATTGAAC	CTAAGTCTCA	GGAGTTGTTG	ACTCTTACAC	CCACCAACCA	GGTGATAGGA	300
CTCTCATGTC	TGGTCTCGC	CCACAGGTGA	AATTGTGACA	TATACATGGT	CACAGCTCAC	360
AGGTGAGGTG	ATAACTCACA	TACCTGGATC	CAGCTAACAG	AACAGATTTC	GACTCTGATA	420
TCTTAGGCCA	TGAAGGCC					438

(2) INFORMATION FOR SEQ ID NO:154:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCCGGCT	TCATGGCCTA	CAAGATGACT	AAAGTCTTCA	CTCACCAAGG	AAAAGTGGCT	60
CTGTATGGCA	AGCTGGTGC	GTCAGCTAG	AATGAGAGGG	AGAACACTTCA	ATAAAAGATA	120
GATGAGATGG	ATAAAATACT	TAAGAAGATC	GATAACTGCC	TCACTGAGAT	GGAAACAGAA	180
ACTAAGAATT	TGGAGGATGA	AGAGAAAAAC	AATCTGTGG	AAAATGGGA	TTCTGAAATG	240
AGAGCTGCAG	AAAAAGAATT	GGAACAGCTG	AAAACTGAAG	AGGAGGATGC	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:155:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 395 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCCGGCC	TTCATGGCCT	AAATTTAGGA	AGGTCAAACG	TGAATCTCCA	TTTGACAAAC	60
GTCCAATGTC	AGCAGAGATT	AAAGTGGAAC	CCACCACTGA	GTCAATTGGAC	AAAGAGGGCA	120
AAGGTGAAAT	TAGAACCTA	GTGGAGGCCAC	TCAGTATGAT	CCAATTTGAT	GATACTGCTG	180
AGCCACAGAA	AGGAAAATA	AAAGGAAAGA	AACACCATAT	CTCTTCAGGA	ACTATCACAA	240
GCAAAGGAGA	AAAAACTGAA	GAGAAGGAAG	AGTTGACCAN	ACAAGTCAAG	TCTCATCAC	300
TTGTTAAATC	ACTCTCAAGA	GTGGCTAAAG	AGACTTCAGA	ATCTACCAGA	GTTCTAGAAA	360
GTCCAGATGG	CAAAAGTGA	CAGCGTAACC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:156:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCCGCC	TTCATGGCCT	ACAGAGTACT	GAGTGGAAACA	TACCGATGATA	GATTTACAAA	60
TAATGTAGCA	TACTTCTACT	TCATTGTATC	TTAAGTTCT	TGAAATATTG	CTACTGGAGA	120
TTGGAAAGAA	ATCTTAATGT	TATGGGGTAT	TGTCTAAGAA	GCTTTATTTT	AAAACCATCT	180
CATTAATTT	TGTTGCATT	TAGATAATCG	TCCCCAGATG	CCATGTTACC	CTAGTGCAGA	240
GTGGGGGCT	GGATAAGTTT	TTGTTGTAGG	TGGCTATCCT	GTGTTTGTA	GGGTATTTAG	300
CAGCATCCG	GCCTTAAAAC	AAAAATGTTT	TCAGACATTG	CCAAATGTCC	CCCGAGCGGT	360
AAAGTCACCC	CCAAGTTGAG	AACCGCTCTA	TACAAAGAGC	TGTTATTAGA	CCAGACTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:157:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 492 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCCGCC	TTCATGGCCT	AGATTGCTTG	AGGCCAGAAG	TTCAAGACAG	GCTGCCAAC	60
ATAGTGAGAC	CCCCTCTCT	ACCAAATTT	AAAAATGAG	CATGCATCTG	TAGTCCTAGC	120
TATTGGGAAAG	GCTGAGGCAG	GAGGATCATC	TGAGGCCAGG	AGTTTGAGGC	TGCAGTGAGC	180
TAAGAAGGTG	CCACTGCACT	GCTGTTGTCT	CTCAGCAGAT	CATTTTCAGC	TTCTTTGGA	240
GAGTAGCCAT	TAGCAATGCA	AATGTGAAGT	TTGATAGCAC	AATAAATAAA	ACACTGAAAA	300
CTGTAGATGT	TACTTATAAA	ACACTGGCAC	TCAGATAAT	TGGCTTTGGT	CAAGAAGACA	360
GTGAAGCATA	TCCCCTGTTG	GCCAGAGGCT	GTTATCGAT	TGCTCTGAAT	TCAAAACCTG	420
ATATGTCCTC	AAATTTGCTT	AGGGTTGTTA	TCCTGGAAA	TAGAATCTGA	TAGAAGGTGG	480
GCACATCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:158:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 505 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCCGCC	TTCATGGCCT	ACTGCTTCG	TGAAGACAAG	ATGAAGTTCA	CAATTGTCTT	60
TGCTGGACTT	CTTGAGCTCT	TTCTAGCTCC	TGCCCTAGCT	AACTATAATA	TCAACGTCAA	120
TGATGACAAC	AAACATGCTG	GAAGTGGGCA	GCAGTCAGTG	AGTGTCAACA	ATGAACACAA	180
TGTGGCCAAT	GTTGACAATA	ACAACGGATG	GGACTCCTGG	AATTCCATCT	GGGATTATGG	240
AAATGGCTTT	GCTGCAACCA	GACTCTTCA	AAAGAAGACA	TGCAATTGTGC	ACAAAATGAA	300
CAAGGAAGTC	ATGCCCTCCA	TTCAATCCCT	TGATGCACTG	GTCAGGAAA	AGAAGCTTCA	360
GGGTAAGGGA	CCAGGAGGAC	CACCTCCAA	GGGCCTGATG	TACTCAGTCA	ACCCAAACAA	420
AGTCGATGAC	CTGAGCAAGT	TGGGAAAAAA	CATTGCAAC	ATGTTGTCGTG	GGATTCCAAC	480
ATACATGGCT	CAGGAGATGC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:159:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC AAAGAGGCCT AGCCGGAGCA GCTGTCCTGGG AGTCAAGGCT GCAGTAGCGT	60
TTCTTCATGG GGTGCTCCAG GGGGTGCCAC AGACCGACAG GCACCCCAAG GGCCTGGACA	120
CCCCCTCCCA GGCAGGTGCT GCCCCAGGAG GACTGTCTC GGGAAATGAAC CTCCCGCGGG	180
CTTTGGACTG AGGTCCCTGT GGCCCTGGTC TCCTCCCCAT GAAGTGGGAG CGAGGCTCCC	240
CAATGGTGCT TTTGGCTTA GTGTACGATG TTTGCTGTGC TTCCCGCCGT GGAGGGCAGA	300
GCCACCCCCAC ATCAGGATCG GACGTGCTAC CCCTCCCGGT CCCGGCCCTG GCCCAGCCAG	360
CCCAGCCCCTC GAG	373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA AAGAGGCCCTA ATGAATTCTC TGATCACAAA ACAGACCCAG GAAAGCATTC	60
AGCATTTCATGG GCGACAGGCA GGGCTGAGAG ATGCTGGCTA CACACCCAC AAGGGCCTCA	120
CCACCGAGGA GACCAAGTAC CTTCGAGTGG CCGAAGCACT CCACAAACTA AAGTTACAGA	180
GTGGAGAGGT AACAAAAGAA GAGAGGCAGC CTGCATCAGC CCAGTCCACC CCAAGCACCA	240
CTCCGCACTC TTCACCTAAG CAGAGGCCCA GGGGCTGGTT CACTTCTGGT TCTTCCACAG	300
CCTTACCTGG CCCAAATCCT ACCACCATGG ACTCTGGAAG TGGGGATAAG GACGGGCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC AAAGAGGCCT AGTTTACAA AACCGCATTG GTAATATAAA CTAGTTAGAT	60
AACTCAGAGG GTTTTATTGG CCATATTTTT GTTTATGCTT TGTCACAGGC TTAGTCATT	120
GCTTCCATGT GTTTTCATCC TTCAGGATAT CTTCAGAACAG CCTACTTATG GACCAAACAA	180
CTTCTGACCA TCATGGAGAA ATCTCTGGTC TTGCTCAGGG AGGTGACGGA TGCTCCCTC	240
TATGAAGGAG TTGCGTATGG CAGCTACACC ACTAGATCAC TCTCCAATA CATGTTTCTC	300
GTCCAGAGGC ACTTCAACAT CAACCACTTT GGCCATCCGT GGCTTAAACA ACACTTTGCA	360
TTTATGTATA GAACCATCCT GCCAGGTATA GTGAGGGAGTC AGAAAGTGTGA AACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

GAATTCTGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGATATAAAA CAGACTAATA	60
CAAAACAGGTA GCTCTAAATT GTGAGTTTTT CTTAACCTCT TTGATCTTCT GTGATAGCGA	120
TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTGCCTC	180
TTTCCTTATCC TGCCCCCTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT	240
TTTCAGAAGT TACAGCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:163:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

GAATTCTGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATTT AGTAAGACCT GGAAAGCATA	60
GGTAATCAA GCAGAAAATCG ACAAAATGAGA TGGTATCAAG CTAAAAAG	108

(2) INFORMATION FOR SEQ ID NO:164:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

GAATTCTGGCC AAAGAGGCCT AGTTTAACCT CATCAGACAT TATTGCAGCC AGCTGTCAGC	60
CAAGCTCAGT AACCTTCCAA CGCTCATTTTC CATGAGGCTA GAGTTCCIGA GAATCCTCTG	120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTTTTTATG AATGCTGATA CTGCTCCAAC	180
ATCTCCTTGT CCTTCCATAT CTTCCCGAGAA CTCAAAGCTCC TGCTCCAGCT TCCAGGACCA	240
GAAGATCGCC AGCATGTTCG ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:165:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCCGCC	AAAGAGGCCT	AGCAAAA	ACTA	GTTCAA	AAGA	GTTGATT	AC	TTTCAT	TT	60
CCACTTTCTC	ACCCCCATTC	TCCCCTCA	AT	TAAC	TCTC	TCAT	CCCCAT	GATGCC	CATTA	120
TGTGGATTCC	TCGAG									135

(2) INFORMATION FOR SEQ ID NO:166:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 449 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCCGCC	AAAGAGGCCT	AGAAAAA	CTA	GCACAGTG	GA	GTCTGAA	ATA	GCAAGG	GAAG	60
AGAAAAGCAG	AGCTGCTGAG	AGGAAA	AGGA	TTATT	AA	GATGGAG	CCA	GAAG	ATTC	120
CTACAGATGA	ACTGAA	AGAC	TTAACAT	TTAA	AGTTAC	TGATAA	AGAC	TGTA	ATGA	180
CCACTGACAA	TGATGA	TTTA	GAAGATG	AAAC	CTGAA	ATTT	TATAGA	TACT	ATGTTG	240
AAGAAGATGT	CAGC	CAT	AAAAGT	GGTA	GGAA	AACT	CTCT	AAAAC	CTCGA	300
GTGCTGATGA	AAAGAGGT	GGT	TTAGAGA	ATA	TGAGG	CCCC	TAACA	ACAGC	AGTCCAGTAC	360
AAGAGGATGC	TGAA	ATGCA	TCTT	GAGC	TG	TG	GACT	TACA	ATAACC	420
TGTCA	TTACTT	TAGCC	AAAC	TCGAG						449

(2) INFORMATION FOR SEQ ID NO:167:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCCGCC	AAAGAGGCCT	AAAAGGAA	AC	TTGG	ACAAGT	AGAA	AGTG	GA	TGAC	CCAGGC	60
TCCGTTACAT	ATAC	TTGG	GAT	TCC	AGCTG	GGG	ACCT	AGATT	GCTG	AGGACG	120
AGACAGGAAC	ATG	TGG	CTG	C	CCC	AGC	TCT	CTC	TCT	CG	180
TCTGAACGGC	CCC	GG	CTG	TG	ACT	GG	TCT	GAC	TG	GT	240
GTATGAGAGC	GTG	GT	AGAG	ATG	TACA	AGG	GT	ACT	GG	TG	300
ATGTGAGAGC	ATG	TG	GGAG	ATG	TACA	AGA	TA	AGG	GTG	CGAG	360
CATCAGAGAC	CAC	CCG	GAG	CTC	TG	GG	TG	ACT	TG	AGA	420
TGATGCTGGA	TCT	TACT	GGT	GT	AA	AT	GTG	GAC	GTG	ATT	480
CGATCCCTG	GAC	CTG	GGT	TTA	AA	AGT	GTG	GT	GTG	GGT	540
CACACATCCA	GCC	AC	CCC	CGC	GG	GG	GG	GG	GG	GG	565

(2) INFORMATION FOR SEQ ID NO:168:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

GAATTCGGCC AAAGAGGCCT AGTTTCCCTT ATATGTTGCA CTAAATTG ATTCCATCCT	60
TCATGCTGTT TTCAATTATC TTAGTCATC TACACCACAT AAATTATCAC CTTTGTTTC	120
AGTTCCCCAA TTCCATGTG CCACAAACAA ATCTCGAG	158

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC AAAGAGGCCT AGTCTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA	60
TTCCCTCTCA CCAAAAAT CCCTTTATAC AAGTAATTAT CCTGCTATG TCTTCAACT	120
CTAGTTTCCC CACTGCAACT CTTCCCTTAA TATATGTAAC TGCTCTGTTA TCCCTCTCCA	180
GCTACTTCCC TATTTCTGT TCCCTTTAC AGGAAAACCT TTCTCCAGCA TTCCCAATG	240
CCATTGTCTT ACTTCCTCAC ATTCTATTT CTTCTCAAAC CATTTTTATT AGGCTTCTTT	300
CCCCAATGGC TATTGTCAG CTTCACTAA TGCCGTGCAA ATCACCTAT TCTCCAGGTC	360
TTCTTCTTC CCAGTCTCTC GAG	383

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 282 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAAT ATATGAGACC CATTACTCAG	60
TCTCTCTCC TGCCATTAT ACTGCAGGTA TTCCCCAAGT TTCTCTCTC AACCTTGCC	120
TCCTTTCCC TGCTGCTCC CTTAGTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC	180
ACTGACCTGT TTGTCCACAT CCTTGAGTAT CCCACACCA TTTCACACCC AGCATATCCA	240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTG AG	282

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGGCC AAAGAGGCCT AGTGGAAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC	60
TGTTCTTATT CCACTGGTTT CTTTAGCAGG ACTGTTCTAC TCAGCCCTG TGGAAAGAAA	120
CTTCCCACAG GGCTGCACTA GCACAGCCAG CCTTGCCTT TACAGCCTGC TCTTGCTAT	180
TACCATACCA GTGTATGTAT CTTTCCACCT TTGGACTTGG ATGGTATTA AACTCTTCAG	240

GCATAATTGA TGCAACTAGA GTCAAATATGC TGTATATATT AATGATAGCT CTTGGGCATC	300
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGCAGG AACTCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 140 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCC AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTTAC	60
AAAGAAATATA TCTTCAATCA AGGCTCTGTG GCAGCTACA CAGAAAAATG AAGCTTTTG	120
GGTTAGGTGC AACGCTCGAG	140

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCCCTGCC ACTCCCCCTCTC TCTTTTTTTT CCAACATGGC CTTGCTCCGC	60
GTACATCGCC ACCCAGGGAC CGCTGCCGC CACCGTGGCT GACTTTGGC AGATGGTGTG	120
GGAGAGCGGC TCGGTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGGCA	180
GTGCTTACAC TACTGGCCGG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT	240
GGTCTCCGAG CACATCTGTG GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:174:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCGGAAAGG AAATAAGCAG	60
AGGCGCTATT GGCAGGACCT AGAAACTTC CTTGTAACT AGCTAGTATG TTCCCTCTGC	120
CCCTCTTCA TCTTTCTCTC ACACCTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAGGTG	180
CACTCGAG	188

(2) INFORMATION FOR SEQ ID NO:175:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC	TTCATGGCCT	ACTATCTGCC	TTGCGCTCCC	ACTGCCCTGA	CCTGTGCCCT	60
CTCACAGGCC	CCCGTGATGG	CTCGCTGGCC	TCCCTCGGC	CTCTGCTCC	TCCGTGCT	120
GCTGTCCCCA	CGGCCACTGC	CCTTGACAGG	GGCCCATCGC	TTCTCCGCAC	CTAAATACCAC	180
TCTCAACCAC	TTGGCACTGG	CACCTGGCCG	AGGCCACACTC	TATGTCGGCG	CAGTGAACCG	240
CCTCTTCCAG	CTCAGCCCCG	AGCTGCAGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:176:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GGTCAGCCGA	GCATGATAGG	AGACATCATC	AACCTGGCC	TGAAAGGGAG	GGAGGGGAGA	60
GCAAAGGTCG	TCAACGTGGA	GATCGTGGAG	GAGCCGTGA	GTTATGTCAG	CGGGGAGAAG	120
CCGGAGGAGT	TTTCCGTCCC	ATTCAAAGTG	GAGGGAGTCG	AAGATGTGTC	CCCAAGGCCCC	180
TGGGGGTTGG	TTAAGGAGGA	GGAAAGGTAT	GGAGAAAGCG	ATGTCACATT	CTCAGTTAAT	240
CAGCATCGAA	GGACCAAGCA	GCCTCAGGAG	AACACGACTC	ACGTGAAAGA	AGTGACAGAG	300
GCAGGTGATT	CAGTGGCGA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:177:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTCGGCC	AAAGAGGCCT	AAGCAATGTC	TCCACCACTG	CTGCTGCTAC	CCTTGCTGCT	60
GCTGCTGCCCT	CTGCTGAATG	TGGAGCCTGC	TGGGCCACA	CTGATCCGA	TCCCTCTTCG	120
TCAAGTCCAC	CCTGGACGCA	GGACCCCTGAA	CTACTGAGGG	GATGGGGAAA	ACCAGCAGAG	180
CTCCCCAACGT	TGGGGGCCCC	ATCCCCCTGG	GACAAGCCTG	CCTCGGTACC	TCTCTCCAAA	240
TTCCTGGATG	CCCCAGTATT	TGGGAAATT	GGGCTGGGAA	CGCCTCCACA	AAACTTCACT	300
GTTGCCTTTG	ACACTGGCTC	CTCCAATCTC	TGGGTCCCGT	CCAGGAGATG	CCACTTCTTC	360
AGTGTGCCCT	GCTGGTTCCA	CCACCGCTTC	AATCCAATG	TCCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:178:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

GAATTCCGCC	AAAGAGGCCT	AGGAGGAATT	TCCATCTTGC	TCTCAAAGTG	AGTCTGAATG	60
TGCTCGGTGG	TGTCACCCCC	GCCGAGCTGC	CAGTGCAGAA	GGCACTATT	GAACTCCTGC	120
ACACGCCCA	ACTTGTCAAGA	TCGGTCAACA	ACAAAACAGGT	TGTTCTTTT	GACTATCTTT	180
ATTGGCAGCT	TGTCGAACCT	ACTGGCTTGC	TTGGGCTTCT	CCTTGGGTC	TGCAGCGGCG	240
TCCGGGGCAG	TCAGAGCGAT	GCTGCTCTT	TCATCGCTT	CTGTCCTCTC	GCTGTCTACC	300
TCAG						305

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

GAATTCCGCC	AAAGAGGCCT	AGTGCAGCAA	TTTAGAGAGT	GTCAGGAG	TGTGGCTCAC	60
TGGCAGCTGC	AGCTATGTTA	GTGCTCTTT	CTGCCCTCAAG	TTCAAGAACAA	AGCTGGACTA	120
TCTCAGGGTG	ATTGAATTTT	CCTGCTGTGG	AATCATAGAA	GTCTTGAGT	CTCCCAGGTT	180
TGTGTTCAAG	GTCTTCATAT	TCAGATGCTT	GAAGAATCAT	TTCACATTGG	TCTAGCATTG	240
AATCCGAG						247

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

GAATTCCGCC	AAAGAGGCCT	AGTCAAGTTC	ATTTCCAGA	GTCCTTAAGAC	TAAGTTCTGC	60
CTCCCTCATCG	CAGGTGTGCC	GAGAGTTTTT	TTTGAACAAAC	AAAAATTACT	AAGGAACCTC	120
ACTACCTTTG	GCGGTAGAAT	TAGAAAACAG	ATTCAAGT	CACCTACTCC	CCTTCAGTAA	180
TTCGAGACAA	TTATTTTTCT	CCTGACACAA	CATCAGGTCC	CATGAAAAAT	GACACCGTGC	240
CTGGTGTGTTT	TGGGTTCTTT	AATGCTCTT	TTAGAGCCAC	ATTTTCTTT	TCAAACCGAG	300
TCCCCCATCGC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTGGCC AAAGAGGCCT AATTTTCTT CACGTTCTT ATCACCAACCA TGGTTATGTT	60
GGCTGCCCTG GCTCACCATTT GTTTTACTG GGATGTTGGG TTTATATATA ATGTGTGTTT	120
AGCTAAGGTA AAAGGCTACA GGTCTCTTC CACATCCAA ACTTTATG ATGCTTACAT	180
TTCCTATGAC ACCAAAGATG CCTCTGTAC TGACTGGGTG ATAATGAGC TCGCTACCA	240
CCTTGAAGAG AGCGAGACA AAAACGTTCT CCTTTGCTA GAGGAGAGGG ATTGGGACCC	300
GGGATTGGCC ATCATCGACA ACCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:182:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 123 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTGGCC AAAGAGGCCT AGTTGTGAA AAGAAAGACT GTGAGGGTAG CCACAAGAGC	60
ACTCAAATGT CCCAGGTAGA GAAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:183:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTGGCC AAAGAGGCCT ACTGGACAA GTAGAAAGTG GATGACCCAG GCTCCGTTAC	60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA	120
ACATGTGGCT GCTCCAGCT CTACTCTTC TCTGCTCTC AGGCTGTTG TCTCTGAAGG	180
GCCCCGGCTC TGTGACTGGC ACTCGGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA	240
GCATGTACAA GGGATATAAC AAGTACTGGT GCGGAGGACA GTACGACACG TCATGTGAGA	300
GCTCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:184:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 130 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCATT TCCTCTCCAC	60
ATACCCTGCA TAGACTTAA GATTCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT	120

CGTTCTCGAG

130

(2) INFORMATION FOR SEQ ID NO:185:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 416 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCCGCC	AAAGAGGCCT	AGGAGGGGAA	AGAGAGTCG	TTTGCAGAA	GATGAAGAAA	60
AGAGTGAAAA	TTCCTCGAG	GACGGTGACA	TAACGGATAA	GAGTCTTGT	GGAAGTGGTG	120
AAAAGTACAT	CCCACCTCAT	GTGAGGAAG	CTGAGGAGAC	AGTGGACTTC	AAGAAAAAGG	180
AAGAACTAGA	AAGCTGAAG	AAACATGTAA	AAGGCTACT	TAACAGGTTG	AGTGAACCCA	240
ACATGGCTTC	CATCAGTGGG	CAGCTGGAGG	AACTGTACAT	GGCCACAGC	AGAAAGGACA	300
TGAATGACAC	CCTGACCTTC	GCTCTCATGG	GTGCCTGCGT	CACTGCCTCG	GCCATGCCA	360
GCAGACTGAT	GATGGAGCAT	TTCTCTTAG	TCAGCATCCT	TCACCACTTA	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:186:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 344 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCCGCC	AAAGAGGCCT	ACTACATTT	TACCTAAATT	TATAGAAAAT	CAATTCCGAT	60
TGACATCCAG	CTTCGGCAGCT	ACTCTTGAG	GGGCTGTTT	AATTCTGGAA	GCTGCTCTCG	120
GTCAAATTTT	AGGTGGCTTC	CTTGTTCAA	AATTCAAGAT	GACATGTAAA	AACACAATGA	180
AGTTTGCACT	GTTCACATCT	GGAGTTGCAC	TTACGCTGAG	TTTGTATT	ATGTATGCCA	240
AATGTGAAAA	TGAGCCATT	GCTGGTGTAT	CTGAATCATA	TAATGGACT	GGAGAATTGG	300
GAAACATTGAT	AGCCCCCTGT	AATGCCAATT	GTAACGTACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:187:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 488 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCCGCC	AGAGCCTAAA	ATCTACAAGC	ACCAAGGAAGT	CAAGATGCAA	GCACCAGCCT	60
TCAGGGACAA	GAAACAGGGG	GTCTCAGCCA	AGAACATCAAGG	TGCCCATGAC	CCAGACTATG	120
AGAATATCAC	CTTGGCCTTC	AAAAATCAGG	ACCATGCAA	GGGTGGTCAT	TCACGACCCA	180
CGAGCCAAGT	CCCAGCCCCAG	TGCAGGGCGC	CCTCAGACTC	CACCCAGGTC	CCCTGCTGGT	240
TGTACAGAGC	CATCCTGAGC	CTGTACATCC	TCCCTGGCCCT	GGCCTTTGTC	CTCTGCATCA	300
TCCTGTCAGC	CTTCATCATG	GTGAAGAATG	CTGAGATGTC	CAAGGAGCTG	CTGGGCTTTA	360

AAAGGGAGCT TTGGAATGTC TCAAACCTCCG TACAAGCATG CGAACAGAGA CAGAACAGAG GCTGGGATTG CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC CACTCGAG	420 480 488
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(2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC AAAGAGGCCT AGGTCAAGATG CATTAAAACA TATCAAAATG TTACAAAAAT GTATGGCTCC CTTGCTGAGG CCCTGTAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG TAAGTTCAGA ACCAACGTT GAATCAAGTC ATGTACTCTC GAG	60 120 163
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(2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 310 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC TCTGCCTCCA ATTCTACCAT CTTCTTCAT CTTCTCTTT TATCAGGTCT CTGCCCTCCT GTACTTTGTA CTTAGATTCT CCTCTGCCAA GCCCATTCAAG ACTGTGACTG GTAGGAGTGC TCTGCTCAGC TTTCCACTTG AGTGTGTTATC CAAGAAGTTG GATAACCCTC TCAAGTTATG GCCTCCATTG CAGTGCCTCAGTCTATGG GGATGCATTG CACTCACCCT TGGGCCTAGG GCAGGTCGAG	60 120 180 240 300 310
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(2) INFORMATION FOR SEQ ID NO:190:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 516 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC TTCATGGCCT AGGGCCTCA G TCTTTTTACT TTTGCGGCTG TGGTTCTCTG AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCACTGTT TTTCTGACAT TCTGCTCTC ACAAGGGGAT ATTATGTACA CATAAACCTA CTTCCAAAT AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCACTGACC TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTGGCGTG GTGCGTCCTA AGCCAGTGT TCTCGGCTCT GTTCCCTTAA CATGTGTTAG TGTAAATAGA TGTTCTTGGA AAAAAAAA AAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT GGATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGAA ACTCCTGCAA	60 120 180 240 300 360 420 480
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TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCTGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAACATGGT	60
CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAAGCC CAAGGAGGTG ATAGCATT	120
GCAGAGATTG AAAAGAATAG TATTTGATGC CAAATCTACT ATTGTGTCTA TATTCAAGAG	180
CTCACCACTG ATGGGCTGCT TTCTCTTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG	240
CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTGTC	300
TAAAAGTGA AATCTCGAG	319

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

GAATTCTGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTCT	60
GGTAAAAGAT GACAGTGAAT TGTATGGCG ATGGATTAGC CGTGGAAAGGT GTTGAGTATA	120
AGTGGTCTCC AGCCAAACTC TATGGTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT	180
TTATCTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCCAGCCCC AAATAACTGT	240
ACAGTTTAAAT GATGTTCACT CTATACAGT CCCAGATCC ATTGGAATT GCTGAAACAG	300
CATATCCTCA ATGCCCATCA ATTCTCCACG TCCAACTTCT CCATGGCCTC CTCTGCCTCT	360
GCTGATCTGT GAACTTCTCG AG	382

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

GAATTCTGGCC TTCATGGCCT AATATTCTTA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT	60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA	120
GGTTTTTCTA ATTGTTCTA TGCTCTCTCC CTCAAAAAAA AAAAACCTCC TACAATAAAA	180
CTGAAAAAATT GCACAAAGAC ATATTAGTGG AAGACACTG CTTCGTTTAC ACAAAATGAAG	240
AGTATAAAAGC AGAGAAAGTGC TCCTGGGC AAAAGGCAAT TGGCAAAAG CTAAGGAACA	300
TTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC	360

CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCAC TTT AGCACATCAG CAAAGCAT AAACAGCTT TAGGATTGGA ATTATTGCC AGGGGGACT CGAG	420 474
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(2) INFORMATION FOR SEQ ID NO:194:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCCGGCC TTCATGGCCT ACGTNNTAT GTCTTCAGC ACAGAGGTGT CCAGGTGTAT TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGAAA AAGTATAAGG TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAAGA AGAGAAAAGA TCGTCTGAGA AATCTGAAAA AAAAGAAAGC AAGGATACTA AGAAAATAGA AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAT CGATTAAGAA AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCAGGA CATATGGTAA TACTAGACCA AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAAA TTCAATGGAAG AAGTAAGCAA ATGCTCGAG	60 120 180 240 300 360 420 480 499
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(2) INFORMATION FOR SEQ ID NO:195:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCCGGCC TTCATGGCCT AAGCAAAGA GCATTAAGAA GTGTCTGTTT TTGTTATTGC CATTTCATAA ATATTTTAGT AGGTGTCAA TTTCATTGGA TATTCTTTT TTTAATTGT CTTGTCACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTTGAGGAGA GGGAGAACCG AGATTACAG GAGGCCAGCA TGAGGTTGGA ACAAGAGAAT GATGACCTTG CCCATGAAC AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAAGACA AGGCAGATGT GTTGAATAAA GAGCTCCTT TGACCAAAAC CCTCGAG	60 120 180 240 300 337
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(2) INFORMATION FOR SEQ ID NO:196:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCCGGCT TCATGGCCTA AAGGAAACTG ACAAAATTATC CCCAGCTGCC AGAAGAAGAA ATCCTCACTG GACGGCTTCC TGTTTCTGT GGTCATTAT CTGATTGGCT GCAGGGATGA AAGTTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TGCCTTTCA GCCGGTTCA	60 120 180
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GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT	240
TCACTGCTAAA CAACGATGTG TGTGTACACT TTCACTGAAC ACACATTGGC CTGGGTTGCC	300
CCCCAAACCA TGTTCAAGCCA CACGCCTACC AGTTCACCTA CCGTGTACT GAATGTGGCA	360
TCAGGGCCAA AGCTGTCATC CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:197:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 429 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAAATTCGGCC TTCATGGCCT AGTTTTTGTC TTTTTTCTT TTTTGGTATT ATTTTGTGTTG	60
CCACTTATTTC CTAAAATTCA TATTGCTATT AACCGTACAC ATCTTCCAT GTTCTTATAA	120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA	180
CACCCACACCA CACACACACCA CACACGCTGT GCACTCTCCT GAAGCATGTG TGTACATACA	240
TACATATGTG AGGGGTTTTA TGACTGTTT ACCAAATTGT GTTCTTAATA TATACAATGT	300
TGGCTTCTTT TTAGCCATTCA AGAAGTTATT TCAGTCATGG AATGATCTCT ACCCATATAA	360
CTGAAAACAG GTAAAGTTCT TTCTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA	420
GAGCTCGAG	429

(2) INFORMATION FOR SEQ ID NO:198:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAAGAACT	60
GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT	120
GGAAGAACTC CTTGTCCCTG ATGTAATGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA	180
TCCCCTGGATG CTCAGGAGCT GCACCAAGAG GCTGCAACCC AGGAGGACCC	240
TGAGCAACTG CCAGAGCTTG AGGGCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC	300
AGTGGCAGAA GAAGAAATT TGTTGAGAGA ATTTGAGAA AGGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:199:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 312 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC	60
ATTTTCTCTA TACCAATTGT TGACTAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC	120

TTAATTAGTT TTTGTGTTTG AAGTTCCAGA ATCTCTTCCCT GGCCTATGTA TTGTGTTCCG	180
TTGATGGATC TTTCCATCCC ATGGTACCCCT TTACTATTTAT TGCTTCATT TTATTAACCA	240
TTGTTATGCC CTTTCTCTC TCCGTGCACA TCTTCATGTT TGAACCTAA AACACACCG	300
CCAACGCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

GAATTCCGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GTAAAGCAAT	60
ATAATAGAGA GATATTACACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAAG	120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTG TATGGAGAAA ACCTGGAGAA	180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTGTGGCG	240
CTCAGGAGTT TAGATTTAT CATGCAGATA ACTAGGAGCC ATTGAGGAA CTTAAATACA	300
GGACTGATAC CAGATTATAA TGTTTTAAATGATTACTT GGTGTAATT AAAGAAAAGA	360
TTGGATGATT TAGGCAGATC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

AATTCCGCCCT TCATGGCCTA CGTTTTTTA AATTTTTTA ACTACATATT TGATACGATC	60
TTTTCTCTCT GCCTTCTTT TTGATTACTT ACTTTCTACC ATTCTATGTT TTTCGTCACT	120
AGTTTGAAAA TTGTATACCTT TGTTTTATT CTTTCAGTGG TTACCCAGA AATTACAACA	180
AACAAAAATT GCAACAAACCT CGAG	204

(2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

GAATTCCGCC TTCATGGCCT AAAATCATCA TGCATATTAA TTCTCCAAA GCACCTTTGA	60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTATTTAA	120
AGTTTCCCT TACATACCTT GGGGCCAGA TGTGAATAAC ACAGTTGTA CCAATGAAAG	180
AGGCTGGATA ACCTACCAGG GATTCTTTCC CCAAGTGGACG CTCACGACTT ATTAGATGT	240
ACAGCGGTGC CTGGAATATT TGGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC	300

TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAAACAAAC	360
TCAAAGAAAT GTGTTCAGAT GTAATGTAAT TGGACTGAAA AACTGTGGGA AAAGTGGAGT	420
TCTTCAGGCT CTTCTGGAG AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 558 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCCTGTTTC AAGATCATAT	60
AAGCCGTTGC CATTCCCAGA NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTCA	120
GTGAAAGGTAT TTAATGCTTG TTCAACATTA GATTTCTGTT TGGTAGCCAT TAAGCAATAG	180
TTTTCCATTA TCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTAG TTCCTTAANA	240
AGTTTTCTG CTGTTCTTAC TGCCAGTGTG ACAGATTCTT GCTTCTCAGT TGAATAACCC	300
AGGTCTCCAT CCAGGTTTTC AAATACCTCA CCTCCACAG TTTCAITATC TGGATTCAA	360
CAGATCTCTA TCATATTATA AAGGGCATT TGCCCCAGT CACGATCTTT CCGAGCTTTA	420
TTAAAATGTC GAAGGGCATT ATTGGTCTCT CCAGTGTACC AAAGATACAG TCCCTTACAA	480
TACTGAAATC CTGGTTCCA TTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAT	540
CTTGGGACAT CCCTCGAG	558

(2) INFORMATION FOR SEQ ID NO:204:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTCT ACAAGCTCT	60
TCAACCACAC TCATTTCAAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT	120
TCTGGGATAC AGGAAGTAC CAGAGCTTG GATATAAAA ACCCTGGAC AGATATTTG	180
CAGCCTGAAG AGACCTATAT AGACCTACT ATGATACAAT CTTCACATT TCCCTTGGCC	240
CTTCATAATC AAAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTGAGATT	300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCCAGGTT	60
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CGCTTGGGTC CAGATCTGTA TTCCCAGGGC TCATAGAGAT ATTGGCAAC TGACAGATT	120
CATGGCTCAA GAAACCTAAA GACACCTACT TGAATTCTT TGTTGGCAG TCAAATGTTA	180
ACTAGTGTGT TTTCAAGCTT CTATTCTTAG GCATGTTACT TCCCTTGGA AGTCAAAACC	240
AACCATCTTT TAAGTAAGAG GGCTAACCAA ATATGTGCCA CACTAACTCG AG	292

(2) INFORMATION FOR SEQ ID NO:206:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 220 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCCGCC TTCATGGCCT AAAATATTTAA AATCTTGAA GAAGAAGAAG TTGAATTAT	60
CAGTGTGCCT GTCCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTA ATGACTTTAA	120
CAAGAAACTT ACAGCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA	180
CACTTCCATT GTTATGCCAC CCATCTCGAG GCAGGCTAG	220

(2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 333 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAAAAAAATGG CCAAGGCTAC TGGGAAACTA AAGCCAACCTT CTAAGAGATCA GGTATTGGCC	60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCTG CTCCACCCAC TAAAGCAACT	120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCAGC CTGCATCAGC ACCTGCTGAA	180
GATTGATTT CCAGCAAGTAC AGAACCCAAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA	240
TTATCCTCTA AAGCAAAGAG TGCACAAGGG AAGAAGATGC CAAGCAAAAC CAGCTTAAAG	300
GAGGATGAAG ACAAAATCCGG GCCTATACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GGAGACAAGT TCTCCTCACT GAACTGGCAG TACCAAGTGTG GGCTTACCTG TGAGCACAAG	60
GCCGACCTTC TCCCTATCAG TGCACTCGTC CAGTTTATTA AAATTCTGC ACAGTTACCC	120
CACCCCCCTGA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGACACAG AAATGAGGTG	180
TGTTGGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG	240
TGTGTTGCTA AGGGCTTACT GTTGCTGTTG TTCCTCACAT TGCCCTTGTT CCTCAGCAAC	300
CCCCGGACCA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:209:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 517 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

GAATTCTGGCC	AAAGAGGCCT	ATGTCCCTGT	CCATCTTACA	GGCTGACCAA	GCCCAGCCAT	60
GGGTGGTCCA	AATTGCTTAG	GTGGTCCCAA	TTGCTTGCT	GGCCAAGAG	ATGTCTGGTT	120
CTTAACAATA	CAAGAGCTA	TAGAAATTGC	TAAAGGATT	TCAGGCCACAA	CTGAAGCTCA	180
CCAAGAACATGA	GTTTCTGGA	ACTGGTTAAA	GTGTACAGT	AGGGAGTAAG	GAAATAAGAA	240
TCCCCACCAA	ACATAAGAGA	ACAGAATGAT	AATAGTCCCT	ACTAGTCCAT	GACAAGGCTG	300
CCAATTAGGC	ATTAAAGCT	ATCAAAGATG	ATGCTGTGAG	GGACCTGGCA	ACTTTTGTAA	360
TAGTCGTACT	TTAAATGTTT	TATTAATGGC	CAAGCACCAA	ATATTTAGG	ATTGTAGGC	420
TATATGGTCT	CTGTCCTAAC	TACTCCATTC	TGCTACTGTA	GCATAAAAGC	AGCGATACAT	480
CCTAAACCCG	TCGATTGAAT	TCTAGACCTG	CCTCGAG			517

(2) INFORMATION FOR SEQ ID NO:210:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 829 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

GAATTCTGGCC	AAAGAGGCCT	AAGAACATGA	AACATCTGTG	GTTCTTCCTT	CTCCTGGTGG	60
CAGCTCCCCG	ATGGGTCTTG	TCCCAGGTGC	AGCTGCAGGA	GTGGGGCCCA	GGACTGGTGA	120
AGCCCTCGGA	GACCCCTGTC	CTCACCTGCA	CTGTCTCTGG	TGATTCATC	AGTCATTACT	180
ACTGGACCTG	GATCCGGCAG	CCCCCAGGGC	AGGGACTGGA	GTGGATTGGA	TATTTCTATT	240
CACCCGGGAA	CTTCAAACATAC	AATCCCTCCC	TCAAGAGTCG	AGTCACCATG	TCAGTCGACA	300
CGTCCACGAA	CCAGTTCCTC	CTAAAACCTA	NTTCTGTGAC	CACTGCGGAC	ACGGCCGTCT	360
ATTACTGTGC	GAGAGACCTA	TATTGCGCTG	GGGGAACCTG	CTACCCCGCC	AGACTTGACC	420
GCTGGGGGCCA	GGGAACCCGG	GTCATCGTCT	CGTCAGCCTC	CAACAGGGC	CCATCGGTCT	480
TCCCCCTGGC	ACCCCTCTCC	AAGAGCACCT	CTGGGGCACA	GCGGCCCTGG	GCTGCCTGGT	540
CAAGGACTAC	TTCCCCGAAC	CGGTGACGGT	GTCGTGGAAT	TCAGGCGCCC	TGACCAGCGG	600
CGTGCACACC	TTCCCCGGCTG	TCTTACAGTC	CTCAGGACTC	TACTCCCTCA	GCAGCGTGGT	660
GACCGTGCACC	TCCAGCAGCT	TGGGCACCA	GACCTACATC	TGCAACGTGA	ATCACAAGCC	720
CAGCAACACC	AAGGTGGACA	AGAAAGTTGA	GCCCCAAATCT	TGTGACAAAA	CTCACACATG	780
CCCACCGTGC	CCAGCACCTG	AACTCCCTGGG	GGGACCGTCA	GTCTTCCTC		829

(2) INFORMATION FOR SEQ ID NO:211:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 142 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

GAATTCCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAAC CATCAATTG GTAAGCTTTA	60
ATATAACTAC CCTGTTTTT GAATACAGAT AATGCAAAAG AAAACCATT TATACTCGGC	120
TATATACCTT CCACCACTCG AG	142

(2) INFORMATION FOR SEQ ID NO:212:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 555 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

GAAATTCCGGC CAAAGAGGCC TAGTGGATC ATTCTGCCAC ACCATTCCT ACTCAAATAG	60
GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGAA AACTCTGGAA	120
CCAAAACATAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC	180
TCTATTTAC TTGCTGTACT GTTGTACTGT TTATTAAAGA AACAGCTGG TGTTGATGT	240
CCAGGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGGT	300
GCCTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC	360
AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAACATCAGC AGGAGAAAGT GATGAAATTA	420
AATGACCTCT TTCCTTAACCC ACTCATCCGT AAGCCTTGTT ATTTTCATA CAAACCTCGA	480
GCCCCGGGAG GAGGGGGCGGC GGCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG	540
GCCTCTTGG CCGAA	555

(2) INFORMATION FOR SEQ ID NO:213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 97 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

GAATTCCGGCC AAAGAGGCCT ACAGAGAAGGG CGGTGTGTAC AAAAGGGCAGG GACTTAATCA	60
ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCCCTC	97

(2) INFORMATION FOR SEQ ID NO:214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 487 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

GAATTCCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT	60
AAAACGTAAT CAGGAACCTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA	120
TATGAAATCT TCCCAAACAT CTGGCACAAA TGAAACAGTCT TCAGCAATAG TTTCAGCTAG	180
AGATTCTGAA CAAGTTGCAG AATTAAAACA GGAACCTGGCA ACTTTAAAGT CTCAGTTAAA	240

CTCACAAATCT	GTGGAGATCA	CCAAACTACA	GACAGAAAAG	CAGGAAGTGT	TACAGAAAAAC	300
AGAACGCTTT	GCAAAATCAG	TTGAGGTACA	AGGAGAGACC	GAGACTATAA	TAGCCACCAA	360
AACTACTGAT	GTAGAAGGAA	GACTGTCAGC	ATTATTACAA	GAGACCAAAG	AGTTAAAGAA	420
TGAAATTAAA	GCTCTGTCTG	AGGAAGAAC	TGCCATTAAA	GAGCAGCTGG	ATTCATCTAA	480
TAGTACC						487

(2) INFORMATION FOR SEQ ID NO:215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 584 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

GAATTCGGCC	AAAGAGGCCT	ACTGGGCCTT	TCAGCACCTG	CTCCAGCTTC	ACCTTGGTGA	60
ACATCAGGTT	GAAGTTCTCA	GGGTGCTCG	TGATGCCAT	GTTGACAACA	TCCAGGGCAT	120
GCTGGTGGTG	CTTCTGGGCA	GAGAAGAGCA	GTGCCAGCAG	GTGGAGGGCG	TGGGCATCAT	180
CCTTGCCTAC	CTTCAGGGC	TCCCTGAGCT	GCTCCATGGC	ACTGGAGATC	TGTCGGACGA	240
GGGCCAGCTG	CAGCGAGACA	TAGAGGATGA	CCTGGGGTC	ACTGGGCAGC	AGCTGCTGAG	300
CCCTCTCCAG	CGTCTGCAGT	GCCTTCCGGT	GCAATTCAATC	TTGCTTGAC	TTCAGGGTGG	360
CGTCGGTGGC	CTGCAGGCTA	TAGGTGAGAC	CCAGAGGCCAG	GTAGCCCTTG	GGGAGGAACT	420
CCCCGGCTTC	CTCTCCGAGG	CTGATCACCA	TCATGGCAA	GTGCTCTGCT	TCCCTAGGCC	480
AGCGAAGGGA	CCCGATGCAG	ACACTTCGCGG	CCATCAGGGG	CACGGTGCGG	TCCGAGGGCC	540
GCAACTTCAC	ACACTCCCCC	AGCAGGGACA	CAGCGTAGGC	TGAC		584

(2) INFORMATION FOR SEQ ID NO:216:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 532 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC	AAAGAGGCCT	AGACCTGCC	TAAAGATAGA	GTCTTGATGC	ACCGTCTACC	60
TTGTCCCCAA	CCAAGAGTGA	GTAGTGCACA	GAAGTCTCT	GGCACCCCTGG	GAATCCTGCA	120
TTTTTAATGG	ACGAGCAGGG	CAGGAAAGAA	AAAAAAAACC	CAAACCCAT	CACTCTGCCA	180
GCCCCGTGTA	CCAAAGCAGC	CCAAATCAGT	TACCTGACA	ACTCTCATGC	ACAGACTGCA	240
CCAGCCCTGTG	TTGCAAACAT	CACTGCCCG	CTTCTAACAG	GAAGAGATAC	TCTTTTGGGG	300
GTCTTGCAGG	GCCCAGGACAT	AGAGCCCCCT	CTACCCAGGG	CCCTTCCAAA	GCAGAAAGCAC	360
AGAGTCACAT	TTGGCGTGG	CATGAGAGGG	AAATAAAGAG	ATTGGCTGT	AGTGGGAGGG	420
AGGTTTCAGT	GCTTTTCTG	GGGACATTGG	TGCCTATCTC	TATTCTGAGA	GTTGTTCTCC	480
TCATAGGACA	CCATAAAATCG	CATCCAGGAC	CTGCTGGCTG	AGGGTACTCG	AG	532

(2) INFORMATION FOR SEQ ID NO:217:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCCGCC	AAAGAGGCCT	AGTGTGTCG	GGTCTTATAC	AAAAACAACA	CACTGAATGA	60
AGGAATAAAT	ATTTATGAA	TGGAAAATCA	GCAAAGGAAA	AAATGTATA	ATTGTCAATG	120
ACAATGGAA	GCACATAGTG	AGGCTATGAG	TGATTGGAA	ATCATGAGCG	TGCAGTGT	180
TGTTCACGCA	TTTCGGTTGT	GTTTCAGAA	AGTAACCTACA	ACATAGCATC	ATGTAGCAGA	240
ATTGCTGGTT	GTAAGCAAAA	AGGCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCCGCC	AAAGAGGCCT	AATTCTTTT	CTTTTTAATT	TGAAGAAAAA	TCATCAGTCT	60
TGGAATACAG	AAGAGAAACT	AGAAATATAC	GTATTTGTT	TCACATTGAA	ACAGTCATTC	120
TTGAGGAATA	CTCCATACCT	GAGTAGACAG	CCATGTGGCC	ATCGCAGCTA	CTAATTTCA	180
TGATGCTCTT	AGCTCCAATA	ATTCATGCTT	TCAGCCGTGC	CCCAATTCCA	ATGGCTGTGG	240
TCCGCAGAGA	GCTATCCTGT	GAGAGCTATC	CTATAGAGCT	TGCCTGTCCA	GGAACAGACG	300
TCATCATGAT	AGAAAGTGCC	AACTATGGCA	GGACTGATGA	CAAATTTGT	GACTCTGACC	360
CTGCTCAGAT	GGAGAAATATC	CGATGTTATC	TGCCAGATGC	CTATAAGATT	ATGCTCTAAA	420
GATGCAATAA	CAGAACCCAG	TGTGCAGTGG	TGGCAGGTCC	TGATGTTTT	CCAGACCCGT	480
GTCCAGGAAC	CTATAAATAC	CTTGAAGTGC	AGTATGAATG	TGTCCTTAC	ATTTTCTTT	540
GTCTCTGGACT	ACTAAAAGGA	GTATACCAAGA	GTGAACATT	GTTTGACTCC	GACCACCAAT	600
CTGGGGCGTG	GTGCAAAGAC	CCTCTGCAAGG	CATCTGACAA	GATTATTAT	ATGCCCTGGA	660
CTCCCTACAG	AACTG					675

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCCGCC	AAAGAGGCCT	ACTCCCTGTT	TTGAACAAAGT	TTTTTGAGA	ATTCTTAGTT	60
TTAGTTTTG	TTTAGCTTAC	ACACTGAAA	TTTGAGAAG	CATCTAAAAA	ATCCACAAAT	120
TAGTGCAGAA	AGAGGGGACA	ATACCTTAAG	TCATTCTTC	TATAAAAAGA	ATTAAGGTTA	180
CTAAATGCCA	ATTTTAAGC	AAATATATAG	TTTCTTATTT	GCCTTCTGAA	AGACAGCAGA	240
TATAAAAATA	GTTCAATATT	AGGTTTAACA	AGGTTGAAC	AACACATGTA	CTATCAGCTT	300
TATTTTACCT	CCAAAAATAT	TTTAGCTACA	CTTGGAAAAA	AATAAACTTG	AGAATATAAAC	360
TTCACATTT	TAAGGCCAGA	TGCAAGATA	CTTATTAGG	CCTCTTGGC	CGAA	414

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(iii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GACCGTCGAT TGAATTCTAG ACCTGCCCTCG AGATGGAGA CAGAAGGTCC CGGGAGCAGA	60
AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG	120

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(iii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAAT	60
TAATTTGGTA TGCATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAACGCC	120
CTTAGTGAA GTCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATTCCATT	180
GTAGAAAGTC TCTGATAATC TCACCTATAC CATGAGCCAT TCCTCAGTAT CTGTCCTCTT	240
CCTGTTAGTG TTCTACAATT CCTTCTCCT TAATTCTTCT CCGCTTACA AAATGTCACA	300
CAGACAAAGTG CATAAATCTT AAACAAAGCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(iii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA	60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTCATTT TATTTACTTC	120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTGAAG GAGGGGACAT	180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAAG	240
ATGTTTACTC TTCACTTTCA CGCGGAATC ACCACTCTGAG GATCCCCACCC GATGGTTTAC	300
TTGTGTCTG AAAGACAGTG TTACAGAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT	360
TTCTGGGTAT TCTTCTCAAGC AATGCTCACCA CCAAAATAAGC GCTTGCACAA AAGACATTTA	420
TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCACAGA GTGCTCAAGA	480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACTGACG CCACAAGGCA	540
GTTCCTCCAGC CTGGAGCATC GAAATCTTG TCTCTTAAACACATCTGAGA GTGGATTGCC	600
CAGTACACGC ATTAAAAAGA GCAGGACTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA	660
CAGCCTCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTCT TGGGAGAAGA	720
ACTGGATATT GTTGCTGCAAA AAAGTCACGA GGCCCTGCCAG AAACCTGTGCA CCAATGCCGT	780
CCGCTGCCAG TTTTTTACCT ATACCCCCAAC GCTCGAG	817

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

GAATTCGGCC	AAAGAGGCCT	AGGAGATACA	TCATCATATC	ACGGAAAGAG	ATGCAGATAG	60
ATCTTGACC	ATACTTGATG	AACAGTTATA	CTCATTTGCG	TTTCCACCG	TGCACATTAC	120
GAAGAAAAGA	AATGGAGGTG	GGAGTTTAA	TAACTATTCC	TCCCTCATTC	CATTGACTCC	180
CAGCACCCAGC	CAGGAGGACC	TTTATTCAG	TGTTCTCCC	ACTGCCAACCA	CACCCACGCC	240
CGTTTGCAG	CAGTCCATGG	GCTGGTCAA	CCTGTTTACA	TCTGAGAAAG	GGAGTGACCC	300
AGACAAAGGG	AGGAAAGCCC	TGGAGAGTC	CGCTGACACC	ATCGGGAGCG	GCAGAGCCAT	360
CCCCATTAAA	CAGGGCATGC	TCTTAAAGCG	AAGTGGGAAA	TGGCTGAAGA	CTGGAAAAAA	420
GAAATATGTC	ACCCCTGTGT	CCAATGGCGT	GCTCACCTAT	TATTCAAGCT	TAGGTGATTA	480
TATGAAGAAT	ATTCAAAAAA	AAGAGATTGA	CCTTCGGACA	TCTAACCATCA	AACTCCCAGG	540
AAAGTGGCCA	TCCCTAGCCA	CATCGGCCCTG	CGCACCCATC	TCTCGAG		587

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 534 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

GAATTCGGCC	AAAGAGCCTA	AGTAGTTGCT	GCCTTCTTC	AGATCAGGTT	ACCACAATGC	60
CTCCCCGCTG	CTGACGTTTC	ATCCCCACA	CCTCCAGCCC	CAGTTACCTG	GAGCTTCTCA	120
GAACCCACTT	TGCCGGTGC	AAAACACAAG	AGGGGGTGA	AGTGGCTGCC	AGTAATGGCC	180
AGAAACCAAC	CACCAGAGGC	CAGGCTGAA	GACAAGCTCC	GGGTGTCCAG	GGGCTGACGG	240
GCCAAACCATG	TGGCAGGTCC	CAGGGCCAC	CCACTGGCCC	ATCCGCTCT	GAGCTCCACA	300
GTGGTCCCAC	TAATGGGAAC	CTCCCTCTAGG	GAGAGTGATA	CTGCACCTTC	ACCCGTAGGA	360
CTCATATTTA	TAACAATGTG	TAATGGCTGT	AGCAAAAAGC	CCTGTGTTCT	AGATGTAAAT	420
GGTCAAAGAA	ACAAGCGCTC	TATTGTTTG	AATAAAATAG	TCCTGTATCA	480	
TTGTATCTCC	TATTCTGGAT	TAGTGCCCTT	TGGACAGTAG	ACTGTAACCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GCTCCACTCT	CTCCCTATCC	ATTTGTAAGA	ACAGGCTCCC	CTCGCCGAAT	ACAGTTGTCT	60
CAAAATCATC	CTGTCTACAT	TTCCCCACAT	AAAAATGAAA	CAATGCTTTC	TCCTCGAG	118

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 582 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

GAATTCCGCC	AAAGAGGCCT	AAATTTAGT	AGAGATGGAA	TTTCACCATA	TTGGCCAGGC	60
CGGTCTAAA	CTCTTGACCT	CAAGTGATCT	GCCCCGCTCG	GCCTCCAAA	ATGTTGAGAT	120
TACAGGCGTG	AGCCACCATG	CCTCTCTAC	ATTCTTTCT	TCTGTTCACT	ACAGCCGTGG	180
AGAGCTCCGG	GTTGTCTTCG	ACATGTGCAC	TGCCCTCTCT	TTTATGGACC	TTTAGGGCTG	240
GCTGCACCCCT	CCGTCCTGTG	CACCCCTCTG	CTCCCTCTCC	ACCTGGCTAG	TTCTGTGTTGG	300
CCACTTTTGG	AAATTCTATGC	CAGTCCAGTC	CACCCCTGAGT	ACATCCTCTT	TCTGTGTCAC	360
TGAGCTCACT	ATGCTGGGTT	TTATCTATGT	CTCCCTCGCA	ACTAGATCAT	TCACGTCTTG	420
AAGTTAGGCA	TCATGCCCTTC	TTCAATTCTG	TACCTCCCAA	CTCAATGCTT	AGCACCCAGC	480
AGGGGCTCAA	GACTGTGTG	GGAATGAAGG	ATTCTGTGA	AAATGCAGGG	AGATGGAAGG	540
CTGAGCGTTT	CTGTTCCCTTG	ACCATTCCCG	GGTTGGCTCG	AG		582

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

GAATTCCGCC	AAAGAGGCCT	AAAAACTTAT	AAATAAGTGA	GACTACTGCC	CCCTAGCCTA	60
AAATTCAATTC	CCTGCGCTCA	CTCAACATCA	TAGTTCTTTA	GGAAAGACAAG	TTGTTCTATA	120
GCATAAAAGAT	ACAACCTATT	TAGATAGTCT	AAAGATTCTC	CTCTGTTCT	CAAATACAGT	180
CAGTTATGCA	GCTCAAAATG	CCTCTCATTT	TCTGCTTTT	TTTTCTCTTA	CTATTGTTGCC	240
CTCCAGGCTT	TGCAAGAACAA	CATGTTATTTC	TCCCCCTAAA	ATCTGTTCT	CTTCTAGTTT	300
TCTCTCTGCC	AGCAATGCCA	CCACACAGTC	TTTTGGTTTT	GCACCAAGAGA	ATTAGAGATG	360
AACCCCTCAT	CTCTAACATCA	TCACAAGTTT	CCTCAGATTT	AAACTCTCAA	ATCAAGATGT	420
TTCTCACCAT	TTCCATTACT	ATTGCCCCA	GCTTCTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

GCCTAAACCG	TCGATTGAAT	TCTAGACCTA	TCTCGAGAAA	GAGTTGTTCT	GGAAAGAAAAT	60
GAAGAAAAAGA	GCAGAACCAA	TCTCAAGCAG	CCAAGTGGTG	AAGTTGGATG	TATGTGACCC	120
TACGTCTCTC	GAG					133

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGGAAATCTAC TGATACCAAA CGACAAAAGC	60
CTTCTGTCCA TTCAAGACAA CTGGTTCTA AGCCACTGAG CTCATCTGTT AGCAATAACA	120
AAAGAATAGT TAGTACAAA CGAAAGTCAG CCACAGAGTA TAAAATGAG GAATATCAA	180
GATCTGAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAT TCGCTATCA AGTAGTGCT	240
CCAGAGAACCTTATAAGAAT CAACCTGAAA CGGGAAAAGG GATCCTGAAA	300
GGAGGGCCAA ATCTCTACG CCAGATGGTT CTGAGAGAAT TGCGCTTGAA GTGGATAGAC	360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGA CTCTGAAGAA TATGGCTCTG	420
ACCATGAGAC TGGCAGCAGT GGTTCTCTG ATGAGCAAGG GAACAACACT GAAAATCTCG	480
AG	482

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

GAATTCCGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TAAAGTAAG CACCACACCA	60
TGTTTCTGTC TCCCCAGCAC CCAGCACAGT GCTGTGAACC TTGCGAGATG CTAGATAAAT	120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA	180
GAGGTGACTC CACAGTGCCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCTTT	240
TGCTTTGCCC TGGATATAGG GGTGCTCTTC TACTGTAATT GGGTGTGGAA AAACCTGGC	300
TTTATGGTAT TCCATTAGGT TCTTTTCATT TAAAGTAGTC TAAAATCAA AGTATCCAAT	360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTTAGTCAGT AAAATGTTAG	420
AAATCAAAC ATAAGAAAAT TCAAGTCCTT TATTTGTGT CTTGGGTATA TGTCAATTATT	480
TTAAATTCCA CAGCTCTCGA G	501

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

GAATTCCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAAC	60
TGTGCAGAGT CTCTTTTGC CTCACCATGT GGTCTGTGC TCTTCAGGT GGGAGTTTG	120
GGGCCTCCAG GGCAGCAGGC ACCACCTCA TATCCGGCC CACATCCAGC TGGACCCCT	180
GTCATACAGC AGCCAACAAAC ACCCATGTTT GTAGCTCCC CCCAAAGACC CAGCGGCTTC	240
TTCACTCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TCGGGAGTCC AACAGCATT	300

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

GAATTCTGGCC	TTCATGGCCT	AATCAGAAGC	TTTCAAAAT	TCCGTCTTC	AGAAGAAACA	60
CCCGTGGAGG	AAGAAGACAT	TATAACAAAC	AAATTAGAA	ACTGGGATCA	TGAGTGGAAA	120
AACAAAGGCA	AGAAGGGCTG	CCATGTTTT	TAGACGTTGC	TCTGAAGACG	CCAGCGGTAG	180
CGCCAGTGGC	AATGCTTTGT	TATCAGAGGA	CGAAAATCCT	GATGCGAATG	GGGTAACTCG	240
ATCATGGAAG	ATTATTCTAA	GTACAATGCT	TACACTGACT	TTTCTCTTG	TAGGACTCCT	300
AAATCATCAG	TGGCTTAAAG	AAACAGATGT	TCCTCAGAAA	TCCAGACAAT	TATATGCCAT	360
GCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

GAATTCTGGCC	TTCATGGCCT	AAAGAAGAAT	TGACACCTCT	TGGAGTCCAC	TTGGCACGAT	60
TACCCGTTGA	GCCACATATT	GGAAAATGA	TTCTTTTG	AGCACTGTC	TGCTGCTTAG	120
ACCCAGTACT	CACTATTGCT	GCTAGTCTCA	GTTCCAAAGA	TCCATTGTC	ATTCCACTGG	180
GAAAAGAAAA	GATTGCAGAT	GCAAGAAGAA	AGGAATTGGC	AAAGGATACT	AGAAGTGATC	240
ACTTAACAGT	TGTGAATCGG	TTTGAGGGCT	GGGAAGAGGC	TAGGCGACGT	GGTTTCAGAT	300
ACGAAAAGGA	CACACTCGAG					320

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

GAATTCTGGCT	TCATGGCCTA	CGATGAGGCT	GCTGTCATT	TGTTGTTGG	CTCTATTTGC	60
TGTCACTCAA	GCAGAGGAAG	GAGCCAGGCT	TTTGCTTCC	AAATCAGTC	TGAACAGATA	120
CGCCGTGGAG	GGACGAGACC	TGACCTTGCA	GTACAACATC	TACAATGTTG	GCTCAAGTGC	180
TGCAATTAGAC	TGGAACATAT	CTGATGATTC	CTTCCCTCCA	GAAGACTTTG	GCATTGTC	240
TGGAATGCTC	AATGTCAAAT	GGGACGGGAT	TGCCCCCTGCT	AGCAATGTCT	CCCACACTGT	300
GGTCCTGCAG	CCTCTCAAGG	CTGGTTATTT	CAACTTCACC	TCGGCAACAA	TCCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:235:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 513 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

GAATTCCGGCT	TCATGGCCTA	GTTGTACGTA	ATGTATTAT	ATGTTAAATT	GTTATGTATA	60
TAGATGTCA	AGTCTTGCTA	GAATTGCCCT	CAGTAGTT	AAAGGGCAGA	AGGGGAAGAT	120
ACTGACTAGT	CATAGAAATA	CCTCATTGCG	CTGTGGAAG	AGAAGGGAAG	CCTCTTCAGG	180
GTGAGGTGAAT	GGCAAAGCGG	TTGCTTCTGG	CTCCCTCTTC	CCCTGTGGTC	TTGGAAGTGT	240
GTGGAAGGCA	GGGACAGAGA	TGGAGGGCGA	GCCAATAGAC	TGAAGAGACC	ACAGCAATTG	300
GCTCCTCCAT	CTAGAGATT	TCTTGGCAGT	ATTCATGGG	ATGTTAAGCA	AAGGAACCCA	360
AAGGAATCGT	TTCAAATGGA	CTCATGGCTT	AGAAATCTTT	ATTCTTAGGG	CAGTCAGTAG	420
TATTCTAAAG	CTTTCTGACA	AGATAAAGGA	AGTCACAAA	ATTCTTTTT	TTAAATTGTA	480
TCTAACCTCT	AAACACAAAC	CAAACACTCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:236:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

GAATTCCGCC	TTCATGGCCT	ACTTGGAAAT	GTTTGATGCT	ACTCTGAAAG	ATCGAGAACT	60
GAGCTTTCA	TCGGCTCCAG	GTACTACCAT	GTTTCTGCAT	TGGCTAGTGG	GAATGGTATA	120
TGTCTTCTAC	TTTGCCCTCT	TCATTCTACT	ACTGAGAGAG	GTACTTCGAC	CTGGTGTCCCT	180
GTGGTTTCTA	AGGAATTGTA	ATGATCCAGA	TTTCAATCCA	GTACAGGAAA	TGATCCATT	240
GCCAAATATAT	AGGCATCTCC	GAAGATTAT	TTTGTCACTG	ATTGTCTTTG	GCTCCATTGT	300
CCTCCTGATG	CTTTGGCTTC	CTATACGTAT	AATTAAGAGT	GTGCTGCCTA	ATTTCTTCC	360
ATACAATGTC	ATGCTCTACA	GTGATGCTCC	AGTGAGTGAA	CTGTCCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:237:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

TTCATGGCCT	AGAGATATGC	TTCTTTGTAC	CAATATGGAA	AATCTAAAG	AAAAAACCCA	60
CACTCAGCAC	TATGAATGTT	ATAGGTACCA	AAAACTGCAG	AAAATGGGCT	TTACAGATGT	120
GGGTCCAAAC	AACCAGCCAG	TTAGTTTCA	AGAAATCTT	GAAGCCAAA	GACAAGAGTT	180
CTATGATCAA	TGTCAGAGGG	AAGAAGAAGA	CTTGAAACAG	AGATTTATGC	ACCGAGTCAA	240
GGAGAAAGAA	GCAACATTAA	AAGAAGCTGA	AAAAGAGCTG	CAGGACAAGT	TCGAGCATCT	300

TAAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTTCGCGC	ATTCGGTACA	ACAAGAGAGA	TAAACGATGA	AACC GTTACA	TTATACAGCT	60
TCAGCACTGG	CGCTCGGACT	GGCGTTAATG	GGGAATGCAC	AGGCAGTGAC	GACCATTCCG	120
TTCTGGCATT	CTATGGAAGG	GGAACTGGGT	AAAGAGGTGG	ATTCTCTGGC	CCAACGTTTT	180
AACGCCGAAA	ACCCGGATTA	AAAATTGTA	CCGACCTATA	AAGGCAACTA	CGAACAGAAT	240
TTAACGCGGG	GGATTGCGCG	ATTCGTAC	GGCAACGCGC	CGGCTATTTT	GCAGGTTTAT	300
GAAGTTGGCA	CCGCCACCAT	GATGGCGTGC	AAAGCATT	AACC GTGTA	TGACGTGTTT	360
AAAGAGGAG	GGATTCACTT	CGATGAGTCG	CAGTTTGTC	CGACCGTTTC	AGGTTACTAC	420
TCCGACAGCA	AAACGGGCCA	CTTACTCTCC	CAGCCATTC	ACACCTCGAC	CCCCGTTCTC	480
TATTACAACA	AAGACGCTT	CAAGAAAGCA	GGATTAGACC	CGGAACAGCC	CCGAAAACC	540
TGGCAGGATC	TGGCGGACTA	TGCCGCGAAA	CTGAAAGCCT	CCGCATGAA	GTGCGGCTAC	600
GCCAGCGGCT	GGCAGGGCTG	GATCCAAC	GAAAACTTA	GCGCCTGGAA	CGGTCTGCCG	660
TTTGCCAGCA	AAAACAACGG	CTTGACGGC	ACGGACGCGG	TGCTGGAGTT	CAATAAGCCG	720
GAGCAGGTGA	AACACATCGC	CATGCTCGAG				750

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTTCGGCC	TTCATGGCCT	ACTTACAGAA	CCTATTCACT	GGGAAGGAAG	CCCTCATTAT	60
AATGATTTTC	ATTCTTATGT	GTGTTTCAGG	ACGACTGGGT	TTGGATTCA	AAGAGGATTA	120
TTATACACCA	CAAAGGTGG	ATGTTCCAA	GGCCTTGATT	ATTGTTGCAG	TTCAATGTGG	180
CTGTGATGGG	ACATTTCTGT	TGACCCAGTC	AGGCAAAGTG	CTGGCTGTG	GACTCAATGA	240
ATTCAATAAG	CTGGGTCTGA	ATCAGTGCAT	CTCGGGATT	ATCAACCATG	AAGCATACCA	300
TGAAGTTCCC	TACACAAACGT	CCTTACCTT	GGCCAAACAG	TTGTCTTTT	ATAAGATCCG	360
TACCAATTGCC	CCAGGAAGA	CTCACACAGC	TGCTATTGAT	GAGCGAGGCC	GGCTGCTGAC	420
CTTGGCTGC	AACAAGTGTG	GGCAGCTGGG	CGTTGGAAC	TACAAGAAC	GTCTGGGAAT	480
CAACCTCGAG						490

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

GAATTCTGGCC	TTCATGGCCT	ACTTCTGGAC	TCTATAGAAC	CCACTGCCTC	CTGATGAAGT	60
CCCTACTGTT	CACCCCTTGCA	GTTTTTATGC	TCCTGGCCCA	ATTGGTCTCA	GGTAATTGGT	120
ATGTGAAAAAA	GTGTCATAAAC	GACGTTGGAA	TTTGAAGAA	GAAGTGCAAA	CCTGAAGAGA	180
TGCATGTAAA	GAATGGTTGG	GCAATGTGCG	GCAAACAAAG	GGACTGCTGT	GTTCCAGCTG	240
ACAGACGTGC	TAATTATCCT	GTTCAGTGTG	TCCAGACAAA	GACTACAAGA	ATTCAACAG	300
TAACACAGCAAC	AACAGCAACA	ACAACATTGA	TGATGACTAC	TGCTTCGATG	TCTTCGATGG	360
CTCCTACCCG	TTTCTCCCAC	TGGTTGAACA	TTCCAGCCTC	TGTCTCCTGC	TCTAGGATCC	420
TCGAG						425

(2) INFORMATION FOR SEQ ID NO:241:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

GAATTCTGGCC	TTCATGGCCT	AACCAGAACT	AATTGCTAA	GTCTTTGTT	TAGTCCTGCA	60
AGACTGATGC	TTAACACACA	GTCTGTTCTC	CTGTGTCTAG	GTCAGGAAC	CCAGTTGCT	120
TTTCTGTTTT	GTGTCCTGGT	AGCAGCTGTT	GAGTAACTT	CATTGGAGGT	TGGGAAGGAA	180
GTGAGGAGAA	AGTGTCTTG	TTTAGTGTGTT	TATTTCTTAT	AATAGGATGC	TGCCTAACCC	240
AGTTCATCTC	TATGTCTGT	TCACTGAATA	TTCCGGGTAA	TTGAAAGAAA	ATATAATGGA	300
TGGGCTCCAT	AAAACCAGC	TCAAAAATAA	ATTCTGTCA	GTAAAGATTT	CTTGTCAAGA	360
TGTCTTGGAT	TGCACCTTTG	TTGAGGAAAG	ACAGTGTAAA	TAGTTAAAGA	ATGTTGATAA	420
AATTGAAACA	TTTGGTTGTG	GAATTGTGTG	TGGTACTCGA	G		461

(2) INFORMATION FOR SEQ ID NO:242:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 508 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

GAATTCTGGCC	TTCATGGCTT	ATGGACAAGG	AAGCATTCA	AGCATGGTGT	CATCTGACTC	60
CACATCACCA	GATTCTTCTT	TAACAGAAGA	ATCACGTTCT	GAGACAGCCA	GTAGTTTATC	120
CCAGAAGATT	TGTAATGGGG	GATTATCTCC	TGTTAACCCA	GGAGATTCTA	AGGACATGAA	180
GGAAATTGAG	CCCAATTATG	AAAGTCTCT	TGTTAACCCA	CAGGATAAA	ATTCATCACA	240
GGCTTCCAAA	AGCTCATATA	AAAGTCCAGA	GACCCACAAA	GCAGTCCTTG	CTCTCCGATT	300
AGAAAGAGAAA	GATGGAAGGA	TTGCTGTACA	AACTGAGAAC	GAAGAAAGTA	AAGCCTCTAC	360
AGATGTTGCT	GGGCAAGCAG	TAACCATAAA	CCTTGTCCCC	ACAGAAGAGC	AAGCAAAACC	420
TTACCGAGTT	GTGAACCTGG	AACAGCCATT	GTGCAAGCCA	TATACGTGCG	TGGATGTGTC	480
AGCAGCCATG	GCCAGTGAGC	ACCTCGAG				508

(2) INFORMATION FOR SEQ ID NO:243:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

GAATTCCGGCT	TCATGGCCTA	GGTTTCTGT	ACATGGAGAT	TAAACTGTCT	TCCAAAGTGA	60
AGAGTTTATT	GTTCTAGATC	TTGAGCACAA	AGGTTGGTAT	ACGTTAATAA	AAAAAAATAGC	120
AAGGGAAAGAA	AATCATTTCC	TTCATACCAA	GTAAAGAGAGC	ACTTATCATG	GTAGGCACITG	180
GCTTTGCAAT	TATGAGACCA	GTAGTAGAAA	TAGCTTGTAGT	TTCTCTCAATT	TTCCTGGAGT	240
ATTCTTCAGA	CTTCTTTAC	ACTGCTCAAG	GTGGGGCGAG	TGGCAGGGCG	GACCCCTGGCG	300
ACCTGACGCT						323

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 396 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

GAATTCCGGCC	TTCATGGCCT	AGCCTTCAGTA	GCAAATAAGG	ACATCATCTG	CTATAACCTA	60
CAAGCAGTTG	GACAGATATT	CTACATTCTC	TCATTTCTCT	ACACCGCTAA	TTACATCTGG	120
TATTTGTACA	CAGAGCTGAG	GATGAAACAC	ACCCAGAGTG	GACAGAGCAC	ATCTCCACTG	180
GTGATGAGATT	ATACTTGTCG	AGTTGGTCAA	ATGCCCTTTG	TTTCTCTAAG	CCTGATACCT	240
CTGCTATTGA	TGACACCTGT	ATTCTGCTG	GGAAATACTA	GTGAATGTTT	CCAAAACITC	300
AGTCAGAGGCC	ACAAGTGTAT	CTTGATGAC	TCACCACAT	CAGCCATGGC	TGAACATTCCA	360
CCTTCTGCCA	ACACATCTGT	CTGTAGGACA	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 370 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

GAATTCCGGCC	TTCATGCTTA	GCCTCAGCTC	TTTCTCTGG	GTTGTTTGTA	TTTTCTTTTC	60
TGTCCCAAAC	AGTTTCCCCC	ACAAAAAGAA	CTTTATGTCT	TTCTCTGTCT	CCCTCAGTC	120
CTTCCAGTCA	GCAGCCTGTG	ATTGGGCTT	TCCCCTCAGA	AAAGAACAAAT	CCAGAACCCA	180
CTGTTTAAAA	CAACTGTATT	TTGCCTTGGG	AAAGTCCATT	GCCTTCCCTG	AAAACATTAA	240
ACATTCTCC	GATCCCCAGC	CTGAGTCTCT	CTGCTCTGG	CCCCCATCCT	GCTCCACAGC	300
AGGGCTGGTG	TGTCCAGCAC	AGAGTGAACC	TCCGATGCC	TTTCCCACCC	GCCGCCCTGC	360
CTCCCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCTGGCC	TTCATGCCATA	GAGAACTTGA	AGCTTTGCGG	CAGGAATTAA	AAAAGAAAGA	60
CAAGACGTTG	AAAGAGAATT	CCAGAAAGTT	GGAGGAAGAA	AATGAGAAC	TCCGAGCAGA	120
GCTACAGTGT	TGTTCTACAC	AACTGGAATC	CTCTCTCAAC	AAATACAACAA	CCAGCCAGCA	180
AGTCATCCAA	GACTTGAATA	AAGAGATAGC	CCTTCAGAAG	GAGTCTTAA	TGAGCCTGCA	240
GCCCCAGCTG	GACAAAGCTC	TGCAAGAGGA	GAAGCACTAT	CTCCAGACTA	CCATCACCAA	300
AGAAGCCTAT	GATGCATTAT	CCCGGAAGTC	AGCCGCTGC	CAGGATGACC	TGACACAAGC	360
CCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 450 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCTGGCC	TTCATGGCCT	ACGGCTTCAT	AGTAACTCTT	TGCCATATCT	CTAGCCAGCT	60
GCATAAAACG	TTCGCCATCA	GATGGAGACA	AAAGGTTAA	AATACGCCAA	TAACCATCCA	120
TGGCCATTAA	ATGATCACCC	ATCTGTTCAT	AAAGGCTTGA	TCGCTCCAC	AGATAACGGA	180
CATTAGTAGG	TTCATATTAA	AGAGCTTTTG	TATAGCAAAA	AATAGCCTGC	TTAATATTGT	240
CTTGTTCAG	AGACATTTCT	GCCAGTCTAA	CCCATTCTTC	TGTGTCAGT	GGATTAAAT	300
GCGCAGCAAT	CAACTCAAAAC	TGCAATGATT	TTTCATGTC	ACCTTGGTCC	TCCATATATCA	360
TGGCTAGAGT	AGAGAATGGC	TCATAAGCCA	GAGGAGCTG	TCTTATGATT	TCCATGCACA	420
TCAATATCGC	CTCTTCACGT	TCTCCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 408 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCTGGCC	TTCATGGCCT	AACGAAACTG	ACGTCTACCT	CATGGGGCTG	CTGTGTGGGT	60
TTGGGAGGCA	AAAATCTATG	AAGGGTTTTT	TGAAATCCA	TAGGTGCCAC	ATCTATGAGA	120
TGTTTGATAA	ATGTGAATAT	GCTTTTACAT	TTGGGCTTAT	CTAATTGCA	ATAAGAGAGC	180
CTCTCTCTAT	CAACACCAGC	TTCTCTCTCG	GGCTGTTGC	TCAGGGAAAGG	CAAGAAAGCC	240
ACCGTCTGGC	CCTCTGCCTT	CTCTAAAGTG	CTGTTGGAGC	ATGGAGGAGC	TGGAGGAGAT	300
GGGGATGGAC	TGACAGCTAA	GAGGGCGGCT	GCTGGGACTA	GATAGTGGAT	GAAGAAAGAA	360
GGACGAGGAA	GCCGTGGGGC	AGCCTCTCA	CATGGGGACG	AACTCGAG		408

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

GCCCATGACA GAGAGCAGTG CCAAAGACAT GGCGTACGAA CATCTGATAG ATGACTTATT	60
GGCTGCTCA G AAGGAAATTC TGTCTAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT	120
TACCGAAGCC CACAGCAGAA TGTCGGATT GAGAGGGGAG CTAACGAGA AGCAGAAGAT	180
GGAACTGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGGAGCTGA GTGTGCTCAA	240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT	300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA	360
ACAGAAGGCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA	420
CACTGAGGCC TTCTCCACCA GCAAGAGCA GCAATCCTTC AGCGATCTAG GGTCAGGTG	480
CAAAGGGTCC CGGCACGAGG AGGTCAATTCA GCGTCAGAAA AAGGCCTTAT CTGAACATTG	540
AGCGCGAATT AAAGAAGTCG AG	562

(2) INFORMATION FOR SEQ ID NO:250:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

GAATTCCGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCC AGTGTAGTCT	60
CTCACAGCCT GGACCCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA	120
TTCCCTCCCTT TCTGAGCCAG GGCCAGGTG GTCCGGCCGC GGCTTCCTGT TCAGAGTCCT	180
CCGAGCAGCT CTTCCCCCTTC AGCTTCTCCT GCTCTCTCTC ATCAGGGCTTG CCTGCCTTGT	240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCG GGTCAATTCCA	300
CCCTATGCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:251:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

GTCTTGACAA AACCTAACCTT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT	60
TTTTTTGTTT TGTTTTGGTT TTTTTTTTTT TTTGGCTTG ACTCAGGAGA TCCCTCCCG	120
GGGCTCCCGC CGGCTCTCTCC GGGATCGGTC GCGTACCGC ACTGGACGCC TCGCGGCGCC	180
CATTTCCGCC ACTCCGGATT CGGGGATCTG AACCCGACTC CCTTCGATC GGCGAGGGC	240
AACGGAGGCC ATCGCCCGTC CCTTCGGAAC GCGCTCGCC CAACTCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

CGGGAAATGA	AGCGGAAGCA	GGCGGAGTCC	GAGAGGCCCA	TCTTGCCAGC	CAATCAGAAG	60
CTCATTACTT	TATCAGTGCA	AGATGCACCC	ACAAAGAAAG	AGTTTGTAT	TAACCCCAAC	120
GGGAAATCCG	AGGTCTGCAT	CCTGCACGAG	TACATGCAGC	GTGTCCTCAA	GGTCCGCCCT	180
GTCTTATAATT	TCTTTGAATG	TGAGAACCCA	AGTGAGCCCTT	TTGGTGCCTC	GGTGACCATT	240
GATGGTGTGA	CTTACGGATC	TGGAATGCA	AGCAGCAAA	AACTTGCAGA	GAATAAAGCT	300
GCCCCGAGCTA	CACTGGAAAT	CCTCATCCCT	GACTTTGTTA	AACAGACCTC	TGAAGAGAAG	360
CCCCAAGACA	GTGAAGAACT	CGAG				384

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

GGGACGTTGG	TGTTGAGGTT	GGCATACGTA	TCAAGGACAG	TAACTACCAT	GGCTCCCGAA	60
GTTTTGCCAA	AACCTCGGAT	GCGTGCCTT	CTGCCAGGC	GTCGCGAAA	TCATATGGCT	120
GTAGCATTCG	TGCTATCCCT	GGGGGTTGCA	GCTTTGTATA	AGTTTGTGT	GGCTGATCAA	180
AGAAAAGAAGG	CATACGAGA	TTTCTACAGA	AACTATGATG	TCATGAAAGA	TTTGAGGAG	240
ATGAGGAAGG	CTGGTATCTT	TCAGAGTGT	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

GAGTTTGTG	GGCTTACCTT	ATTTAACATTA	AAAAGAAGTC	GGGGCTACCA	GGGGTTTCAG	60
ACGTGCTCGA	TGGACACGTG	ATTTGTAAC	AGCCAAGATT	CTGGGGGACG	GGGGGGTGCC	120
TCGGTGGGGT	TGACATTGTA	GTTACAGGGA	CTTAATAATG	GCCAGCCTTT	CACATCCCAT	180
GGGAAACCGC	CCCCCCCAGG	CTTGGAGAAAT	GGGGGTCAA	GTGCCTATCC	CCCTTTGGAT	240
GTAAAATTCA	TGGTTAGTAA	ACATCATCCG	CCCAACAAACA	AGCAAAGCAC	ATCGCAAGAT	300
TAAAACAAAG	AATCCGCCGT	GAACAGAAGG	CCTCCATCTC	TGCTCTCAGG	CAGGTGTCC	360
TCAGGGAGGA	GCCTCAGGCA	GCTGTTCTAA	CCCTGCTGCC	AACGCCTGGG	CTGTTCTGC	420
CGACAATCTT	CTATTTCTCT	AAAAGAGTAC	GCTAACACGC	TGGCTCTGCC	TTGATTGAAT	480
TCTAGACCTG	CCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

GAATTCCGGCC	TTCATGGCCT	AGAGAACCGT	TGCTTTCCG	AGTTGCTCTT	CTTCCAGGCT	60
CCGTTGGTGG	TCGGCATGGC	CCGTGGAAAT	CAACGAGAAC	TTGCCCGCCA	GAAAAACATG	120
AAGAAAACCC	AGGAAATTAG	CAAGGGAAAG	AGGAAAGAGG	ATAGCTTGAC	TGCCCTCTCAG	180
AGAAAAGCAGA	GGGACTCTGA	GATCATGCAA	GAAAAGCAGA	AGGCAGCTAA	TGAGAAAGAAG	240
TCTATGCAGA	CAAGAGAAAA	GTGATGACTG	GCTATTGGA	AAACCTGGGT	GCTACTGCCA	300
ACTGGGTGTA	TCATAAGCTC	TAAGATCAAG	ATTTGTAGA	GTGGACAGTC	ATTACATATG	360
TTTAACTTA	TCCTTTAAAA	ACTATTTAA	ACTTATCCT	TTCAGCTTTA	CTTAGTGCAG	420
TGTTTAGAA	GCAGTCTTCA	AAGAATAAAA	CACTAACCAT	GCTGCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

GAATTCCGGCC	TTCATGGCCT	AATTTTGTAT	TTTTAGTGGA	GACGGGGTTT	CTCCATGTTG	60
GTCAAGCTGG	TCTTGAACTC	CCAACCTCGG	GTGATCCGCC	CGCCCTGGCC	TCCCAAAGTG	120
CTGGGATTAC	AGGCGTGAGC	CACCGCGCCT	GGCCAGTAGT	TTCTTAACAT	TAAATTATCC	180
GCAAAATGGA	AGAAATACTA	GAGGTCTGTG	AGGATGTTTC	TTCTCTTTCA	GTCTGTTGTG	240
GTGGTTTGTA	GTITACAGGG	GCTTGGGIAA	CTGGATTTTT	AGGTTTATTA	TTTAAATAG	300
TAGACTCAAC	ACTATTTGT	ATTGCACTAG	AGATCACTTA	TGCAAGATCTT	TTTAATACCA	360
TTTCATAGAG	ATTAAGGGTC	ACCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

GAAACAGGGC	TCAAAGAAGT	GGTAAC TGCT	GTGGAGGAAA	TGACAAGTAA	AGGAAAACCA	60
GGACAAGAAG	TCTTGGAAAGA	CGACCAGGAA	AATACTTTAA	AATATGAGTA	TGAAGAACAC	120
TTTGAAGTAG	ATGAGGGAGAA	ACAAGGTAA	AAATCTAATG	AAGAAGGACA	GGCTGATGTT	180
CAAATGAATG	GAATACCGCA	GTCACCTTG	GATGATAAAA	AAGATAATT	AGACCCCTGAA	240
AAAGAGAGTG	AAACCTCATC	ACAGAAGGCA	CCAGATGCC	GTGACAATGT	GAAAGATGAG	300
AATGATGGAT	GCTCTGAGAG	TGAACGTCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 544 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

CACAGTGCTG	GNTCACACA	AGATGNTCNA	GGTGTCA	GCC	GTACTGTGTG	TGTGTGCAGC	60
CGCTTGGTGC	AGTCAGTCTC	TCGCA	CGC	GGCGGTG	GCTGCAGCCG	120	
GGACGGCGT	AATTTCTGG	ATGATAAAC	ATGGCTACC	ACAA	TCTCAGTAC	180	
GGAAGTCGA	CAGTGGAA	AATTCCGAGA	CGATGATT	TTCCGCA	TT GGAGTCCAGG	240	
AAAACCCCTTC	GATCAGGCTT	TAGATCCAGC	TAAGGATCCA	TGCTTAAAGA	TGAAATGTAG	300	
TCGCCATAAA	GTATGCATTG	CTCAAGATTC	TCAGACTGCA	GTC	TGCATTA GTCACCGGAG	360	
GCTTACACAC	AGGATGAAAG	AAGCAGGAGT	AGACCATA	AG	TGGAGGG GTCCC	420	
ATCCACCTGC	AAGCAGTGC	CA	CCCAGCC	TT G	TT GTGGTT CAGATGGTC	480	
TACCTACTCT	TTTCAGTGC	AACTAGAATA	TCAGGCATGT	GTCTT	AGGAA AACAGAATCT	540	
CGAG						544	

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

GAATT	CGGCC	TTCATGGCCT	ACATCAGCAT	CCCTGGGAGC	ATCAGAAATG	CAGAGCTCAG	60
GCCCC	CCCCG	GAGCTACCGA	ATCAGAACCT	ACATTTACA	CA	CCCCTCAG CTCAGAGCTT	120
GTTT	CTCCCT	GGATTCCATG	GCCTTGCT	GCTGGCAGCC	CGGGGTTAGG	GCATTCGTT	180
GTCAC	CTGGC	GACGGTGAAG	CCTAGTTCC	TCCAGAGAGA	TTATGCTGCT	CTCCATCAA	240
GTGAAGTGGC	AATGGTCCA	GCCTGAGATT	TCTGCC	GT	TTAAGTA CGAGAGTGTG	300	
GGCTGACAAT	AAACTCC	TTT	CTTCTACCC	CTTCTGTTCT	CATAAGGAGA	AA	360
CTGGAAGAGA	TGAAGCTTG	CTT	TTTACCC	AA	TTAAATT GAC	393	

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 705 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

GAATT	CGGCC	AAAGAGGCCT	AAGGGATTGT	TATTCCTTTA	AAAAAAAACC	AATACCAAAG	60
AAGCCTACAA	TGTTGGCCTT	AGCCAAAATT	CTGTTGATT	CAACGTT	TTATTCAC	TT	120
CTATCGGGGA	GCCATGGAAA	AGAAAATCAA	GACATAAAC	CAACACAGAA	CATTG	CAGAA	180
GTTTTTAA	AAATGGAAA	AAACCTATT	TCTTTGGAAA	GTGAAGC	AA	CTTAAACTCA	240
GATAAAAGAAA	ATATAAC	AC	CTCAAATCTC	AAGCGAGTC	ATT	CCCCTCC	300
CCCAACAA	CCACGGAAT	AA	CAGATT	TCCAGTA	ACT	CATCAGCAGA	360

GGCAGTCTAA AACCCACATC TACCATTCC ACAAGCCCTC CCTTGATCCA TAGCTTTGTT	420
TCTAAAGTGC CTTGGAATGC ACCTATAGCA GATGAAGATC TTTTGCCTAT CTCAGCACAT	480
CCCAATGCTA CACCTGCTCT GTCTTCAGAA AACTTCACTT GGCTTTGGT CAATGACACC	540
GTGAAAACTC GTGATAACAG TTCCATTACA GTTAGCATCC TCTCTTCAGA ACCAACTTCT	600
CCATCTGTGA CCCCTTGAT AGTGGAACCA AGTGGATGGC TTACACACAA CAGTGATAGC	660
TTCACTGGGT TTACCCCTTA TCAAGAAAAA ACAACTCTAC CTACC	705

(2) INFORMATION FOR SEQ ID NO:261:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 729 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

GAATTCGGCC AAAGAGGCC ACTTACTTGC AGTCCACAGG CAAGGCCAA TAATGCATAT	60
ACTGCCATGT CAGATTCTTA CTTACCCAGT TACTACAGTC CCTCCATTGG CTTCTCCTAT	120
TCTTTGGGTG AAGCTGTTG GTCTACGGGG CGTGACACAG CCATGCCCTA CTAACTTCT	180
TATGGACAGC TGAGCAACGG AGAGCCCCAC TTCTTACAGG ATGCAATGTT TGGGCAACCA	240
GGAGGCCCTAG GTAGCACTCC ATTCTCTGGT CAGCATGGTT TTAATTCTT TCCCAGTGGG	300
ATTGACTTTCT CAGCATGGGG AAATAAACAGT TCTCAGGGAC AGTCTACTCA GAGCTCTGGA	360
TATAGTAGCA ATTATGCTTA TGCACTTAGC TCCTTAGGTG GAGCCATGAT TGATGGACAG	420
TCAGCTTTTG CCAATGAGAC CCTCAATAAG GCTCTGGCA TGAAACTAT AGACCAAGGG	480
ATGGCAGCAC TGAAAGTTGGG TAGCACAGAA GTTGCAGCA ATGTTCCAAA AGTTGTAGGT	540
TCTGCTGTTG GTAGCGGGTC CATTACTAGT AACATCGTGG CTTCCAATAG TTGCGCTCCA	600
GCCACCATTTG CTCCCTCCAAA ACCAGCATCT TGGGCTGATA TTGCTAGCAA GCCTGCAAAA	660
CAGCAACCTA AACTGAAGAC CAAGAATGGC ATTGCAGGGT CAAGTCTTCC GCCACCCCA	720
ACACTCGAG	729

(2) INFORMATION FOR SEQ ID NO:262:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 686 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

GAATTCGGCC AAAGAGGCC ACTTACCATGT CCTCTTGGAG CAGACAGCGA CCAAAAAGCC	60
CAGGGGGCAT TCAACCCCAT GTTTCTAGAA CTCTGTTCT GCTGCTGCTG TTGGCAGCCT	120
CAGCCCTGGGG GGTCAACCTG AGCCCCAAAG ACTGCGAGGT GTTCCGCTCA GACCATGGCA	180
GCTCCATCTC CTGTCAACCA CCTGCCAAA TCCCCGGCTA CCTGCCAGCC GACACCGTGC	240
ACCTGGCCGT GGAATTCTTC AACCTGACCC ACTTGCCAGC CAACCTCCTC CAGGGCGCCT	300
CTAAGCTCCA AGAATTGAC CTCTCCAGCA ATGGCTGTTA AAGCCTCTCG CCGGAATTCC	360
TGCGGCCAGT GCGCAGCTG AGGGTGTCTGG ATCTAACCGG AAACGCCCTG ACCGGGCTGC	420
CCTCGGGCCT CTTCAGGGC TCAGGCCACCC TGGACACCCG GGTATTGAAA GAAAACCGC	480
TGGAGGTCTCT GGAGGTCTCG TGGCTACAGC GCCTGAAAGC TCTGGGCTAT CTGGACCTGT	540
CTGGGAACCG CCTCCGGAAA CTGCCCCCG GGCTGCTGGC CAACCTCACC CTCTGCGCA	600
CCCTTGACCT TGGGGAGAAC CAGTGGAGA CCTTGGCCACC TGACCTCCTG AGGGGTCCGC	660
TGCAATTAGA ACGGCACATT CTCGAG	686

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

GAATTCTGGCC	AAAGAGGCCT	AGGAGAGAGG	AGGTGCTGCA	AGACTCTGT	GTAGAAAAAT	60
GAAGAGGGTC	CTGGTACTAC	TGCTTGCTGT	GGCATTTGGA	CATGCTTTAG	AGAGAGGCCG	120
GGATTATGAA	AAGAATAAAAG	TCTGCAAGGA	ATTCTCCCAT	CTGGGAAAGG	AGGACTTCAC	180
ATCTCTGTCA	CTAGTCCTGT	ACAGTAGAAA	ATTTCCCAGT	GGCACGTTTG	AACAGGTCAG	240
CCAACCTGTG	AAGGAAGTGTG	TCTCAGCTGC	CGAACGCTGC	TGTGCGGAAG	GGGCTGACCC	300
TGACTGTTAT	GACACCAGGA	CCTCAGCACT	GTCTGCAAG	TCTGTGAAA	GTAATTCTCC	360
ATTCCCCGTT	CACCCAGGCA	CTGCTGAGTG	CTGCACCAAA	GAGGGCCTGG	AACGAAAGCT	420
CTGCATGGCT	GCTCTGAAAC	ACCAGCCACA	GGAAATTCCCT	ACCTACGTGG	AACCCACAAA	480
TGATGAAATC	TGTGAGGCCT	TCAGGAAAGA	TCCAAAGGAA	TATGCTAATC	AATTTATGTG	540
GGAAATATTCC	ACTAATTACG	GACAGCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

GAATTCTGGCC	AAAGAGGCCT	ACCAAGCAAG	AACAGCTAAA	ATGAAAGCCA	TCATTCTATCT	60
TACTCTTCTT	GCTCTCCTTT	CTGTAACACAC	AGTCACCAAC	CAAGGCAACT	CAGCTGATGC	120
TGTAAACAACC	ACAGAAACTG	CGACTAGTGG	TCCCTACAGTA	GCTGCAGCTG	ATACCACTGA	180
AACTAATTTC	CCTGAAACTG	CTAGCACCAC	AGCAAATACA	CCTTCTTTCC	CAACAGCTAC	240
TTCACCTGCT	CCCCCCATAA	TTAGTACACA	TAGTTCTCC	ACAATTCCCTA	CACCTGCTCC	300
CCCCATACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

GAATTCTGGCC	TTCATGCCCTA	GCCTCTGAGT	TCAGCTCAGA	ACACAGATGA	TCTCATTGAT	60
TCCTCACGTC	AACCTTGGGA	AATCTGGGT	CCCTGGGACG	TCCACACATG	AGGACCGAGG	120
CTCAGGGACA	TCAAGGGACT	GGCCTGGTCC	CAGAAACAGG	GAGTAAAATG	GGAAAGTAAAC	180
TCAGTCCAC	GTCTGCTGA	CTCCAGAGTT	TGGGCCACTG	AACCATGCGG	CTGCCATCTT	240
GGAGTTCTTT	GAGCTGTGAA	GTGCTGTGCA	TCGTTGATT	CTGTTCCCT	TTTGTGCAGG	300
TACCAGGATT	TCTATGCATT	CGACCTGTCA	GGAGCCACTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:266:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

GAATTCCGCC	TTCATGGCCT	ACAGGAAGCA	CAGAAAGACA	AAATGGAAA	TGTCTAGTTC	60
CATGTTGATG	CCTTCAGAAG	ATGCAGGTGA	ACAAAGAGAG	GCCGGAAAT	CAGAGCTAGT	120
TGAAACCCAA	CATGTTACCT	TAGAGCCAGA	GCTACACTG	AGTCTCTAA	GCACAGTCAA	180
ATCCCAGGAT	TATGCTGAAA	CAGAGCGAGA	GGTCATTTTA	CAAGCTATAG	AGGCCATGGA	240
GGCCACAGAA	GCCCTGGAGG	CCACAGACGC	CATGGAAGCC	ATAGATCAAG	GTAGCATGAA	300
AGATTATGGA	GATGTGATCT	CTAACGCTGGA	AAGACTCGAG			340

(2) INFORMATION FOR SEQ ID NO:267:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

GAATTCCGCC	TTCATGGCCT	AGGCACCCCT	AGGCAGACTCA	GGGTTGGGG	AGGAGGAGAC	60
CAGACGGGGC	CTTGGCTGCG	ATGGCCTCTT	CACAGGGCTG	CCGTGAAGAA	ACTTCGTGAC	120
AGCGGGCGGAG	AGGTGGCCCA	GGAGTGAGAC	AAGCAGGCC	CGGGCCTTGG	ACTCAGACAT	180
GCTGGGTCCG	GTCAGGGCCC	TGTGGGAACC	AGTGTTTAG	GGACTGGGTA	CTCTCTTAGA	240
GAAGAACTGA	TGCTAAAGAG	TCAGGAAGAC	ACGAGCGGGC	CAAATAAAAG	AGGAAGAGAG	300
GCCCTCAGGA	CATCATGGCA	CTTACTGCTT	GGATTGTCT	CCCCGTCCAG	AATTCTGTGG	360
ACTCGAG						367

(2) INFORMATION FOR SEQ ID NO:268:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

GAATTCCGCC	TTCATGGCCT	ACTTGGGAAT	TAACATCTTC	GATAAATCCC	AGAAGTCTTT	60
AAGTGACAGT	AGAGAGCCTA	CAGAGAAAGCC	TGGGAAAGCA	AAAAAATCTA	AGAGCCCAGA	120
AAAAGTGTCA	TGTTTCTCAA	ACTCCTCTC	CAAACAGGAA	TCAAAAGTAA	ACAATGAGAA	180
GTITTCGTACT	AAGAGCCCCA	AGCCTGCCGA	AAGCCCCAG	TCAGCCACTA	AGCAGTTGGA	240
TCAGCCCCACT	GCTGCTTATG	AGTATTATGA	TGCTGGCAAT	CACTGGTGCA	AAGACTGCAA	300
CACCATCTGT	GGGACTCGAG					320

(2) INFORMATION FOR SEQ ID NO:269:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 542 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

GAATTGGGCC	AAAGAGGCCT	AGGGATATT	ACTGAGGGCC	TACAGGGTGC	CCAATACTGA	60
GCTAGCTAG	CTCAGGGACC	TGTACACACA	TGCATTCTCC	ATTAGGGTTC	TGCAATCCTG	120
ACACTATTAC	TATCCTCAAG	GACTCTGCG	ATCCAGACCC	GTCATTAGT	TAGCAATGAG	180
AACCCCTGCC	ATGGCCAAGT	TACACAAGAA	CACCCCTGCC	CTACCTCTGC	CCCTGCGNGA	240
TCTGAAAGTA	ACCTGGTCTG	AAAGAGAAAGT	AAAGATGTGG	CTGTCCTGG	GTGCTAGGGA	300
GAGAGGGCTG	TTGACAAAGC	CACCAAGCTGT	CTCCAGTCAG	AGCCAGGGAG	ACAGGCTTCT	360
CCCTGCACCA	TCCGCACTGC	CATAGACACA	GCAGCCAGCA	ACAGCACTTG	GACCATTACG	420
GAGTTCAGG	CCCAGTCTCC	AACTGACCTC	CCTCCGTCTC	CAGCTGCCCA	TGCTAACAG	480
AGCCAGGGCA	CAAGACCTCA	CTTGGAACAA	GTACCAGGCA	GAAGAGAGCA	TNACCNGCCG	540
GT						542

(2) INFORMATION FOR SEQ ID NO:270:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 613 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GAATTGGGCC	AAAGAGCCTA	GTGATTGAA	TTCTAGACCT	GCCTCCTTT	CCACTTGAAT	60
TGTTAAATTG	TTTACTCCAG	CATCTTAAG	TATTCTGTG	ACCTGCTGA	CTATTCTTTG	120
TTCTAGCACCA	TCAGATGTCA	CCTGTATATG	AATTGTTCT	GCCACAATAC	TAGCAGAATG	180
ACGCCAAAAAA	TGTGGGTCTC	GGTATGATAT	TAATCCTCA	ATTTCTGTG	TCTTTCTAA	240
AGCAATATGT	AGTTCTTTT	CATATTCTGG	TGGCAATCTC	AGGAGTAGAA	CCTGGCAGGC	300
ATCTTTAAC	AGTGGAAACAA	CACTGAGAAA	TATTAATAAT	GCAATAAAAAA	GAGAACAGAG	360
TGGGTCAAGCG	ATGAACCATC	CAAACCTGTC	TATAAGAACT	GTGGATACGA	TCACACCAAT	420
GCTGCCAGAGA	GTATCTGCCA	AAACATGTAG	AAATACACCC	CTCATGTTAG	CATTGATGCC	480
TCCACCCGCA	GATCCGTGGC	TGTGACCATG	CCCATGGTCA	CTGTGTCCAT	GCATATGATG	540
TGAATGGCTG	TGATCAGATG	AGTGACAGCT	TCCTTGAGCC	AAACCGTCG	ATTGAATTCT	600
AGACTGCTC	GAG					613

(2) INFORMATION FOR SEQ ID NO:271:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 763 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GAATTGGGCC	AAAGAGGCCT	AGTCTGGTTC	TTGCTTGATC	TGAGAGCTTC	CATCAGTCTC	60
TTTTATTCT	TCTGTGGCTG	GAACTTCAA	CTGGCTTGGT	TCAGCTGATT	CTTGTATCAC	120

GGGGCCTTCT GACTCACTCT GATCAACCAG CTGGTTATTAA ATCACAAAGTC CTGGAAATGG	180
TCTAATGACC GTGAATTGAA TAAACTCGGC AGAGTCTAACG ATCCTTCTCA TGGAGCTGAT	240
TTCCAGGTAG CTGGGGCTT TGAAAGGACA CCCCCGGGG CATGCCATCA ACTACCACAC	300
AGCCAGGTT AATTGTGATT TCCCTGTAGG GAACCTTCAC AGGAAAACCC ATACCAATAG	360
CTTCACCAAA TTTCCGACTA AAGAGGTCA TCACCTGTTC TCTTAGCTGT CTAGCTTTTT	420
CAACTTTGGA GAGTCCTTCAT TTATCATCAT CTGGATTGTG CACCTGAAATG ATGTTAAGGT	480
CTTCAACACC TGATGCAGTA GTATTAAACAT TGGGTGATGA ATTATTTTTT CTGGGAGGGC	540
TCTTAGAGGA GGTGCTCTCC TTAATCGCCG TCTCAAACAT TTGGGCTTT TTAATGATGA	600
ACTTAATTGTT GGCTTGTTT CTGAGTATCT TCTCCAGCCT CGGAATGCCA AAAGTCGATG	660
GTCTTCGGAA TGGCACACCC TCAGGTAAGC CTTCCACATA AAAGTCTTCC GGGAAAGACT	720
CAAATAACGC GAACGGCACC TTCACAGCTT GTTTAAGGCC AAG	763

(2) INFORMATION FOR SEQ ID NO:272:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

GAATTCGGCC AAAGAGGCCT AATTAAGGAA ATACTTTGCA TAAATTAATC AGCCCCACAG	60
TATTTCTTA ATAAGAATAA AATGAATTAA ACACTGATTC TG	102

(2) INFORMATION FOR SEQ ID NO:273:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 565 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTCGGCC AAANAGGCCT ACNCCAGTCA AGGAAAGTCAGTNGCAAGA AGGAANTGTC	60
TAAAAGAGAT GGCAAGGAGA AAAAAGACAG AGGAGTGACG AGGTTTCAGG AAAATGCCAG	120
TGAAGGGAAAG GCCCCCTGCAG AANACGTCTT TAAGAAGGCC CTGCCTCCTA CTGTGAAGAA	180
GGAAGAGAGT CCCCCCTCAC CTAAAGTGGT AAACCCACTG ATCGGCCTCT TGGGTGAATA	240
TGGAGGAGAC AGTGAATGAG AGGAGGAAGA AGAGGAGGAA CAGACCCCTC CCCCACAGCC	300
CCGCACAGCA CAGCCCCAGA AGCAGAGAGGA GCAAACCAAG AAGGAGAATG AAGAAGACAA	360
ACTCACTGAC TGGAAATAAC TGCGTTGTCT GCTTGTAGA AGSCAGTTTC CCAATAAAGA	420
AGTTCTGATC AAACACCGAC AGCTGTAGA CCTGACAAG CAAACACCTGG AAATCCACCG	480
GAAGATAAAA CAGTCTGAGC AGGAGCTAGC CTATCTGGAA AGGAGAGAAC GAGAGGGAAA	540
GTAAAGGAA ATAGGAAATC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:274:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 188 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCCGCC	AAAGAGGCCT	ACTTAACATCA	AGGCCAAAC	TAAGGATTAA	GGTAGAGTGT	60
ATTAGCCTT	CAATACCTGC	TTATTAACAA	GTGTTTCA	TACTTTCAA	AGGTGTGAG	120
AAGTTTGTA	AATAAATTTC	CTGATAGGAT	AAACTAGATT	CCCTATGATC	TCTTATTTAT	180
TTATCATT						188

(2) INFORMATION FOR SEQ ID NO:275:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 555 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCCGCC	AAAGAGGCCT	AGTCCGTGAT	GCGTACACAC	CTGTCGAGCA	CGAGCTCCTC	60
TAGGCGGTGC	AGGTCGCAAG	CCACGTACTC	CAGGCCATG	TCGGTATNC	GTGGGCACCA	120
CGAGAGGTCA	AGGNTGCGCA	GCTTGCAG	TCGGTGCAG	ACGAGCTCCA	CGCCGTCGTC	180
GGTGACCTTG	GAGCAGCCCC	AGAGGCTGAA	CGCGGTGAGG	TTGGGCAGGN	TGTGCACCAC	240
GTTGACCAAG	CCGTGGTTGG	TGATCTCCCA	CGAGGAGAGC	AGGCGCAGCG	TGTGCGTGT	300
GTGGCCCTGG	CGCGCCGTGA	AGTAGGCCAG	CGCCGTGTC	GTCACGTGGT	AGGCCTGCAG	360
GCTCAGCTCC	GCCAGGTTGG	GCAGCACGCTG	CGAGATGGCC	GCGATGGGT	CGTCGGCCAC	420
GTTGATGCAG	TCACTCACCG	TCAGCGAGGT	GATGCCGCG	CTCAGGCTGG	ACCACAGGCC	480
GGCCTCGGTG	AAGTCGTTGC	AGCCCGACAG	CTCCAGACGC	ACCACGCCCT	GCATCTGTTC	540
AAGCATAACC	TCGAG					555

(2) INFORMATION FOR SEQ ID NO:276:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 496 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GAATTCCGCC	AAAGAGGCCT	ACAGTGAATA	ATCAGAACGTC	AGTTGGGAG	AAGTCAAAAT	60
GGACACAATC	TTCCTGTGGA	GTCTTCTATT	GCTGTTTTTT	GGAAAGTCAG	CCTCAAGATG	120
CTCAGCTCAA	AAAATACCG	AATTGCACT	GGATCTTTAT	CAAGAGGTTT	CCTTATCTCA	180
TAAGGACAAC	ATTATATTTT	CACCCCTTGG	ATAATTTTG	GTCTTGAGA	TGGTACAAC	240
GGGAGCCAA	GGAAAAGCAC	AGCAGCACAG	AAGACAAACT	TTAAAACAC	AGGAAAACCTC	300
AGCTGGGAA	GAATTTTTG	TACTGAAGTC	ATTTTCTCT	GCCATCTCA	AGAAAAAAACA	360
AGAATTTACA	TTTAAATCTG	CCAATGCCCT	CTACCTTCAA	GAAGGATTCA	CTGTGAAAGA	420
ACAGTATCTC	CATGGCAACA	AGGAATTTT	TCAGAGTGT	ATAAAACTGG	TGGATTTCA	480
AGATACAAGG	CTCGAG					496

(2) INFORMATION FOR SEQ ID NO:277:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCTGGCC	AAAGAGGCCT	ACACCCAGAG	ACTGTAATTT	GTGTAGTTT	TCTTTTTAA	60
CTTAAAGACA	ACTTTAAAAA	ATACCTACAT	TAATGTTTT	TATATTCA	GGTGGGTATA	120
TTCCGCTCAT	TCAAATGGCA	GTAGCCTTGG	CTCACATAAG	ACATGTTCA	TGTGATCTGT	180
ATCTCTGGCAT	ACCAGTTATA	TTTGTGGG	ACTTTAATAG	TACACCATCA	ACAGGAATGT	240
ATCATTGTTGT	CATCAATGCC	AGCATTCCAG	AGGATCATGA	AGACTGGGCT	TCCAATGGGG	300
AGGAGGAAAG	ATGCAATATG	TCTCTTACAC	ATTTCCTCAA	GCTGAAAAGT	GCTTGTGGTG	360
AACCTGCTTA	CACAAATTAT	GTGGTGGCT	TTCATGGATG	TCTAGATTAC	ATTTCATTG	420
ACTTAAATGC	TTTAGAGGTT	GAACAGGTGA	TTCCATTACC	TAGTCATGAA	GAAGTTACCA	480
CTCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

GAATTCTGGCC	AAAGAGGCCT	ACAGAGAACAA	GATAAAAATA	AGCCTGTGGA	ATGACCACCTT	60
TGTGGAATAC	GGCAGAACCG	TGTGTATGTT	TCGCACAGAG	AAGATTCGGA	AGCTCGTAGC	120
CATGGGCATC	CCTGAATCTT	TGCGAGGGAG	ACTCTGGCTT	CTCTTCTCAG	ATGCGGTGAC	180
GGATCTTGCC	TCACACCCCTG	GTTACTACCG	GAATCTGGTG	GAGGAGTCCC	TGGGGAAATG	240
CTGCCCTGGTA	ACCGAGGAGA	TAGAACGAGA	CCTGCACCCGC	TCCCTGCCAG	AGCACCCCCGC	300
CTTCCAGAAC	GAAACGGAA	TTGCTGCTT	GAGGAGAGTC	TTGACGGCCT	ATGCCAACCG	360
GAGCTCGAG						369

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GAATTCTGGCC	AAAGAGGCCT	ACTCTCCCTT	TCCACTCCCT	GGTGTCCCA	GGAGTGAGAT	60
GAGGGTGGAG	GGGCCAGCA	CAGCACCTTC	AACTCTAGGA	TGAGAGAGGC	CTTTTCACAA	120
AACTCTAAGG	CAGGGGAACAA	GGAAACAGAG	AAAGCCGGAG	AACCCCGAGA	GGGCCCAAG	180
AGCGGATTCT	GGTGATTATT	AATGTGCTTG	CCCAATGAAG	AAAGAATACT	GGCACTCTCT	240
AGGTATGATG	AGAGCAGACA	GCAACGTGG	GGCCTGTCTA	CAGTGATTG	CTACCCCAAT	300
GTATGGTCAT	CCACGTTAGA	AGCAGCAGTG	AAAGGGCTGT	TGCTTTTCAT	TATTAACCTC	360
AAATCCCAGT	CCCTAAACCA	GCTCTTGACG	CCCCTCTGTC	AGGTGCTAAT	CCTGGAAACT	420
GGAGGCCACC	TGGTCTCCAC	TTTAGGTGAG	AAAAACCTCG	GAGAAGCCAT	CAGACTGCAC	480
CTGTGGCATG	AGATGCTTGT	AGACAGGTCA	AGAGGAGGAG	CTCTCGAG		528

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GAATTGGGCC	AAAGAGGCCT	ACAGTGTGCG	AGTAGATTTG	AAACTGGAGG	TGAAGGTAGG	60
AGTAAGTGAT	AGATTTAGA	ATTAGTGCTC	AGAGCTGAAA	TATCCAGTCC	GTGAACCTAG	120
AGGCCAGCCT	TCATACCCT	GTGATGACAG	GAAC TACCC	AATCTTTCT	GTCCTTTCT	180
CTCTGCTGTC	CCTCGGGCTG	CCAGGCCAGC	AGCAACACCC	ACAGGTAATC	TCCCCGCTGA	240
CTCCATCCAC	TTGCTCTGCC	CTCTGCCCTC	TCTGTGCC	GTTGACACTG	AGCGTACACC	300
CCAGCAGTGG	CATCCAAC	TG	GAG			323

(2) INFORMATION FOR SEQ ID NO:281:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GAATTGGGCC	AAAGAGGCCT	ACTCAGTCAG	TACCATGCCA	GTTACCTTTT	TTCCTTGTTGA	60
CTTAATGAAT	TGGATTTTCC	TCAATCTGTT	ATTTGTAGGA	GGTTTGTATG	GGGCCAGGGT	120
AGATTTCCAG	ATTTCTGCCT	CAGAGGTAGT	CTTTTCACA	TATGACACCT	GGGTGTGTT	180
CTCTGTGTGG	CCACAAAGTCT	TCTGCCTCTC	AAAAAAATG	TCTAGACCTT	CTAGAAGGTC	240
TTTTGCCGCT	AATTCTGAAC	TTTCCACTCC	TTCCCTTGCA	GCTGTGATTG	GAGGGACATG	300
GCTCCAGCAT	GCCAATGTAA	ACCACCGCCC	CCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:282:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GAATTGGGCC	AAAGAGGCCT	AGGCTCTTCC	ACTTAATTTC	ATACTTCAG	GTCTGGATGC	60
CCATTTAAC	TCTTCTGAAA	GCATGCCCTCC	TTCTGGCTTC	AGGACTCCAT	CTCCAGCCTT	120
ATGATCTAAA	AATAATGGAA	AATTACCCGG	TATCGTTAGA	GCTACACCAA	AATTGCATTG	180
AGCCAAAACT	CGAG					194

(2) INFORMATION FOR SEQ ID NO:283:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

GAATTCTGGCC AAAGAGGCCT AAAATCATCA TATTCATAGA GATATTAAAA GTGCAAATAT	60
CTTACTGGAT GAAGCTTTA CTGCTAAAT ATCTGACTTT GGCTTGAC GGGCTCTGA	120
GAAGTTTGC CCAGACAGTC ATGACTAGCA GAATTGTGGG AACAAACAGCT TATATGGCAC	180
CAGAAGCTT GCGTGGAGAA ATAACACCCA AATCTGATAT TTACAGCTTT GGTGTGGTTT	240
TACTAGAAAT AATAACTGGA CTTCCAGCTG TGGATGAACA CCGTGAACCA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

GAATTCTGGCC AAAGAGGCCT AGCAACATCC ACGCAGCTGC TCATCAGGTA CGAGTGCTTC	60
CATATCCATT TACCCACCAT TGGCAATTG AAAGGACCAT CCAGACCCCC ATAGGATCCA	120
CATGGAACAC CCAGAGGGCT TTCCAAAAGC TGACTACTCC CAAGGTCGTC ACCAAGCCAG	180
GCCATATCAT TAACCCCCATA AAAGCAGAAG ACGTGGGCTA CCGGTCTTCC TCAAGGTCGG	240
ACCTGTCTGT CATAACAGAGG AATCCAAAAC GAATCACCAC ACGTACACAAA AAACAGCTGA	300
AGAAATGCTC TGTAGATTGA GTTGCTGGAG GAGTGACAGC CAGGAGCCCT GACTTCACTT	360
CCTTGGTCC AGTTTTACTC TGATACAGGG TGGATTCCAA AACTGGCTCA GTACATTGCA	420
TGTAGTTAAG CCACATTTTA AAAATAAAGG CTCGAG	456

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

GAATTCTGGCC AAAGAGGCCT AAGGTGGGCC TGTTCATCTT GATTAGCATC CAGGCCTTGG	60
AATATTCAT CAATGACAGC TTTATCTTG ATATTCTGA TGGTGTGGC AAGCTCCTTT	120
GTAAGCAGCT GCTTCAGCTC ACCCCTCGAG	150

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAATTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60
 TCTGAGCATA TTAGCTCTTC TGGGAAAAG TACTACTACA ATTGTGAAAC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:287:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60
 AGATAAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGATG GGAGAAGATG 120
 CAGTAGAGGA TGATGCTGAA GAGAACCTTA TTGTCCTTAGA GTTTCAGCAG GAAAGGGAGG 180
 CCTTTTATAT AAAGGATCCC AAAAAGGGCTC TCCAAGGCTT TTTTGACCGA GAAGGAGAAG 240
 ATTAGAATA TGAATTTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 364 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTTCTGA GGCCAACCTGC CCAATAGTTT CCAGTAGAAA CATGCCATA CCAGTCTAGA 60
 ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAA 120
 CATCCAGTAT AACATGTTT TCATTTTAC TTTCTGCGG TCAATTTTT TAATGATCTA 180
 TTAAAAATTT TTCAAAATG ACAACTACTA TGGAACTACTG AATACAAAGT TCAGTAACAC 240
 AACATTGATA ACAACAAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300
 CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360
 CGAG 364

(2) INFORMATION FOR SEQ ID NO:289:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 471 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60
 TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCCGGAGGAG 120
 CCCTGTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCATTCTGT GCCCAAGGAG 180
 ACCGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240
 CCGGTGGTGA TCAGGCCAGTC GGAAATTGGG GATGCCAGTC GTGTCGGGT CTCTGGTCAG 300
 GGCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420
 GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCA CAGAGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:290:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCTGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA	60
GACAACATCA CTCAAACAAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGATTTAT	120
TAAGCATCTC ACTGTTCTT TTCTTCAGC TGTATGGCAC CCTGTCCTCC TGTACACCAG	180
AGGCTCCCTCA GCTGGTAAG GTGAGCAAC GTTACCAAGA STATATGCTG AGAGGCCATT	240
TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G	281

(2) INFORMATION FOR SEQ ID NO:291:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTCTA ATTCAAGAGGT TAAATTAAT CTAGCCACT	60
TAATAAAACC AGAGATCTA TGGAAATTT AGCCTAACAC AGTGTGGAA ATTGCATAT	120
GTTGATACAA AGAAGTGTGTT GGCCACATTA CAGGTCTAG ACTCAACTGC TATGTGTGAC	180
TGCCGCTCTG TGCCATATGTC TTGCTTTTT GCTGAGTTCC CTATTCAT ATCTCCAGGT	240
GATCCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:292:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTACAA AAATTGTTGG TTCATTGTCA GAAACTGAAG	60
AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTCC	120
TCCCCTACCA TCGCGCTGCC CATGCTCTG CAGGCTCTGG CCCTCTCAA GGAGTACCGG	180
TTACAGTACT TGGCCTCTGA AACAGTGTG AACTGGCTT TTGCGCAGCT CATTCTTGG	240
ATCCCGAAC AGGCCAACT CGAG	264

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 416 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

GAATTGGCC	CTTCATGGCC	TAGGTTCTC	CGTGTGGTC	AGGCTGGTCT	CGAACTCCTG	60
ACCTCAGGTG	ATCCACCTGC	CTCAGCCTCC	CAAAGTGCTG	GGATTACAGG	CATGAGCCAC	120
CATGCTCTG	TATAAATAAC	TTTTAATAGG	CTCTTTTCT	GGCTTTTTT	TTTAGTAACT	180
CAGCCCATT	TCTTCTCTC	AATCTGGCT	TTGTTAATGT	TCATAACGCT	GTCCTACTTT	240
TAAAATTGCCG	TGATTAGAAA	TTACTAGAGA	TATATAAAC	TAGTCTTTG	GGGGATTTG	300
AAAGGGTCAT	AGTATTCTTA	CTGTCTTC	AAATGTACCT	TATATTGAA	CATTGGAAGA	360
TACGTGTTG	TGAATACAAG	TTAGTTTCAT	ACACACACAT	ACACATGACA	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

GAATTGGCC	TTCATGGCCT	ACTCCATTCC	CAGATAGAAA	GCTTGAATGA	AGAGTTGGTC	60
CAGCTGCTTC	TCATCCGAGA	TGAGCTGCAC	ACAGAGCAGG	ATGCCATGCT	GGTGGACATT	120
GAAGACTTGA	CCAGACATTC	TGAAAGTCAG	CAGAAGCACA	TGGCAGAGAA	AATGCCCTGCA	180
AAGTGAAAAG	AAGCCATTCA	ACCAGAGAAG	AAGCTAGAAT	TTATTTGCT	TCTGTGGTTG	240
TAAAAATGCT	GTTGCTAAAG	GTGGCGAGA	AACAAATATC	AGTGTAGTC	ATTGATAATG	300
TCTGAAGCTT	AATGTCCAGT	GATTGGCCTT	TGCTCTTAA	TTTATTTAA	TTTTTACTT	360
GTGCACTTA	ATATCAGGCA	TTTTAATAAA	ATATTGTTAC	AAAAAATGTA	CAGTACTGAC	420
ACCACCAAA	ATCATGGTTA	ATAAAAGAGA	GTCTCGAG			458

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

GTGTAAAACC	AATGCCAGGA	AAACCAAATA	CACAAAACCC	TCCACGGAGA	GGTCCTCTGA	60
GCCAGAATGG	GTCTTTTGGC	CCATCCCTG	TGAGTGGTGG	AGAATGCTCC	CCTCCATTGA	120
CAGTGGAGCC	ACCCGTGAGA	CCTCTCTG	CTACTCTCAA	TCGAAGAGAT	ATGCCTAGAA	180
GTGAATTGG	ATCAGTGGAC	GGGCTCTAC	CTCATCCTCG	ATGGTCAGCT	GAGGCATCTG	240
GGAAACCCCTC	TCCTTCTGAT	CCAGGATCTG	GTACAGCTAC	CATGATGAAC	AGCAGTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

CATGGATCTG CCTCCTGAGA GGGATGGAGA GAAGGGAGG AGCACAAAGC CTGGCTTGC	60
CATGCCAAA CTTGCACTTC CCaaaATGAA GGCTCTAAG AGTGGGGTCA GCCTGCCACA	120
GAGAGACGTG GATCCTTCCC TTCTAGTGC CACAGCAGGG GGTAGCTTC AAGACACAGA	180
AAAGGCCAGC AGTGACGGTG TAGGGGAGG ACTGGTGCA ACAGCAAGTG CCACAGGAAG	240
TGAGGGTGTG AACCTCCACC GGCCACAGGT CCACATTCCC AGTTTGGGCT TTGCCAAC	300
TGATCTCAGA TCCTCCAAGG CCAAGGTGGA GGTGAGCCAG CCTGAAGCTG ACCTGCCTCT	360
TCCCCAACAT GATCTGTCTA CCGAAGGTGA CAGCAGAGGA TGTGGGCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

GTGCTGGTGG CGCGGGGAGT GCGCGTCAAG GTGAACGAGG CCTACCGTT CGCGTGGCA	60
CTGCTCGGT ACCCAGCGTC GCTCACCGAC GTCTCCCTGG CGCTGAGCGA GCTGCGCCCC	120
AACGACTCAG GTATCTATCG CTGTGAGGTC CAGCACGGCA TCGATGACAG CAGCGACGCT	180
GTGGAGGTCA AGGTCAAAGG GGTCGTCTT CTCTACCGAG AGGGCTCTGC CCGCTATGCT	240
TTCTCTTTT CTGGGGCCCA GGAGGCCTGT GCCGCATTG GAGCCCACAT CGCCACCCCA	300
ATCTCGAG	308

(2) INFORMATION FOR SEQ ID NO:298:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GAATAAGTAA ATTCACTGAA AGGAAGAAAT TAAAAGAAAG TGAGGAAAAG GAAAGTGCCTTC	60
TGAAAACAAA CCTTTCTGGA CGGCAGAGCC CAAGTTCAA GCTTCCCTG TCCAGTGGAA	120
CGAAGACTAA CCTCACCAAGC CAGTCATCTA CAACAAATCT GCCTGGTTCT CGGGGATCAC	180
CTGGATCCCC AGGATCTCCA GGCTCTCTG GATCCGTACC TAAAAATACA TCTCAGACGG	240
CAGCTATTAC TACAAAGGGA GGTCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:299:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAGCGACCTT	TGGAATAGTT	AAGCACAGGT	CATTGTGGAC	ATGAATTCA	GCCTCTGTAC	60
TAAAATCTAT	TTCAGGGAA	TTCTGCTA	GTGATTGCT	CACCAATTGA	TATATAATGA	120
ATTATAGGAC	AACTATAAGC	TGATCTGCTA	TAGCTGTCCA	TCAGAGAGAA	TACACGTGCC	180
TATAAACATCT	ATAACAAAAC	GACGATTCTC	CTACAAGAGG	CTGTTCTCA	CTGCTAACGT	240
TGGTGTTCT	GGCGTGGGAA	GAATGCA	GGCGTGCATG	GCATGCACGT	TCAGACAGCT	300
GCATTGTAAG	AGTTCTGTCA	TGCAGTCTGA	AAAGGGAAAGA	AACAGGATGG	CTTCTGTAG	360
CCACACCTGT	GAGGCCTGAT	GATTGTTGTA	TTATTAGATT	ACTGATTTTT	CTTTCTGAA	420
AATACATTG	AGTTTAATC	ACATCTGTGG	AACTCGAG			458

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GGGATGCCTG	TTCTTGGGGT	AGAGAAGTCA	GGTAGCCCAG	GGCCCGCACT	CTCAATAGAC	60
CTTCAGAGAA	AAGGCATCGA	GGTAAATGCC	GCACCTCGAG			99

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GGTCTAACAG	TAACACTACT	CAAGAGACCC	TGGAAATAAT	GAAAGAATCA	GAAAAAAAAC	60
TGGTGGAAAGA	ATCTGTAAAC	AAAAACAAGT	TTATATCTAA	GACTCCAAGT	AAGGAAGAAA	120
TTGAGAAAGA	ATGTGAAGAT	ACCAAGTTGC	GTCAGGAGAC	ACAGAGGCGG	ACATCTAAC	180
ATGGTCATGC	CAGGAAAAGA	GCCAAGTCTA	ATTCCAAGCT	AAAGTTGGTG	CGTAGCCTGG	240
CAGTGTGTGA	GGAGTCCTCC	ACCCCCATTG	CTGATGGCC	ATTAGAAACC	CAGGATATAA	300
TTCATTGCA	CATCACTTGC	CCTTCTGACA	AGGAGGAAGA	AAAGTCCACA	AAAGATGTCT	360
CTGAAAAGGA	AGACAAGGAC	AAAAACAAAG	AAAAGATCCC	AAGGAAGATG	CTGTCCAGAG	420
ACTCCAGCCA	GGAATATACG	GACTCCACTG	GAATAGACCT	ACATGAATT	CTTGTAAATA	480
CACTGAAAAAA	GAACCCAAGG	GACAGAATGA	TGCTGCTAAA	ATTAGAACAG	GAGATTCTGG	540
AATTATTAA	TGACACAAAC	CCACTCGAG				569

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GGGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACCTCTC AGACTTACCT CCCAAACCAC	60
AGATGAAGGA CCTGCCCGCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG	120
GAGATGTCTC ACCCAAGGCT CAGCAACCCCT CTGAGGTAC ACTGAAGTCA CACCCATTGG	180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA	240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CGTACCAACT GCCCAGAAAA ATCAAATACGG	300
GGGCACACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 683 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

ACAGCATGAA GGCAGAACGCC AATGCCCTGC ATCACAAACA CGACAAAGAGG AAGCGTCOGG	60
GGAAGAATGC ACCCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG	120
CAGAGCTGGC TGGCTTCTCC CCAAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGCCCA	180
TTACAGACTC AGAGCTGTCA GATGAGGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG	240
TATCCCGGGC CACAACCTCG CAGCTGACTG ATGTCTCCGA GGATTTGGAC CAGCAGAGCC	300
TGCCAAGTGA ACCAGAGGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT	360
GGGCCCTCCCG CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCTGGACT	420
CGGAGGAAGA GGAAGAGGAGT GTGGCAGCTA AGGAAACCTT GTTGGGGCTC TCATCCCCCC	480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGG TGAAATGCT	540
CCCCCTGGAGG ACCAGTGGAG ACACTGAGCC CCGAGACAGT GAGTGGTGGC CTCACTGCTC	600
TGCCCGGCAC CCTGTACACTT CCACTTTGCC TTGTGGAAG TGACCCAGCC CCCTCCCCCTT	660
CCATTCTCCC ACCTGATCTC GAG	683

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 653 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCCGGCC AAAGAGGCCCT AGAGATGTCT ACTCTCAGCT CACGCCCTGTA ATCCCAGCAT	60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCAGGA GTTTGAGACC AGCCTAACGCA	120
ATAGGCAAAA CCCTGTCTCT ACAAAAATCA CCCAGGTATG GTAGTGTGTA CCTGTAGTCC	180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAT	240
TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAA	300
AAAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG	360
AAAAAGTGTAA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT	420

TTAAAAGTAT GTATAACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACHTTATA	480
TCTCCCAGTA TTTGAATTAA TAATAACAAT CTTTTATCA TAAAACATA TTAAATTAAA	540
CTTTTAGATT TTTTAGGGT ATAAGTAGAA CAGGAACCT AATACATTGT TTTCTACTTT	600
TGTGATAAAG ATAATTATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG	653

(2) INFORMATION FOR SEQ ID NO:305:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 442 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCCGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTATTTTA TCCGATGGTA	60
AATGTAATAA TTAAAGAAG AGGAAAGAAT CATGAAAGGT GCCCCTTAAA GAGGGCTTCT	120
GGCAGAGTTA GGTCAAGGG ACACCTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT	180
GATTTTATC AGAACGTTGG ACTGCTCTG TGTCTTTTA TTGTGCTTAT CTGGGAGGGA	240
GAGTTCTGTC TCTGCTCTA TACATCTTC TGCAAGCTGCA GACATACTCC CTGAGTCTGC	300
TTTTAGCTTT CCTATCTTAG TGCACTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCCT	360
GTTTTACTGG GGCCCATTGT ATGAGAGTGA AGTTGGCAG TTACCCAAGA GACGTTCCCC	420
TCACCTCCCT CGGGCGCTCG AG	442

(2) INFORMATION FOR SEQ ID NO:306:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GAATTCCGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTCTCTT AGAGGTGTT	60
ATGCCCAAGC TCCTCAGACA AGTCATCCC ACTGTGTTGG AGGAAGTTGA AGGGTGAGGA	120
TTTTTAAGAT TTTTATCTTG CTTGAAGTTG TGAAGACTCA ATGACAAATG GCTAGTTTT	180
GAAGGGTCT TGGAAAGTCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA	240
TCTGCCAGA CTCTCACACA TTCAGATGTT TAACGTCACA TGCAATTAAAGT TCTTTGGTT	300
GCATGAGACA GTGATGACCA GAAACTCACT TAGGAAAGGA GATAAGGTGGC AATAAAAGAAA	360
ACAGGGATT CATAGGAATG CAGAAAAAAA AAAACCATGG CCTAATCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:307:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GGGGTTGTCT GAGGCCAGA GGTCGTATAA GGGCCGCTCT ACGGTGTCTT GGGGCCCGGG	60
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CTTGGCCCTT GTTGCAGAAG GGTTGAGGAG CCGGGCTGGG CCCTGCGAC CTCCCGGGC	120
AGCTCGCCCT GCTTGGCCAG CTTCTCCAT AGCTGCTCCT TCCGCCTGAG CTTCTGGCG	180
TGGGGACCT GGTGGCGAG GACGTCTTG GGGCAGGGA CTTTGGATGT GTTCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:308:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 533 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTCACCTT CACCACCTGT	60
CGCATCCTGC ATCCTTCAGA TGAGCTCACT CGGGTCACAC CAAGCCTAA CTCAGCCCCA	120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT	180
CCACGGAGAC TGAGCCTGGC TGAGTCCCTC ACTAACACCCC GTGAGTCCAC GACCACCATG	240
AGCACATCCC TGGGGCTCGT GTGGCTGTT AAGGAGCGGG GCATTTCTGC TGCGTGTAC	300
GACCCCCAGA GCTGGGACAG GGCGGGCGGG GGCTCCCTCC TGCACTCTTA CACGCCCAAG	360
ATGGCTGTGA TCCCCTCTAC TCCGCCAAC TCGCTATGC AGACACCCAC ATCCCTCCCCA	420
CCCTCCCTTG AGTCAGAGTG CACGAGCCCT CCCTACGACA ATTTCCTGGC TTCCAAGCCA	480
GCCAGCTCCA TCCCTGAGGGA AGTGAGAGAA AGAACGTC GCAGGACCTC GAG	533

(2) INFORMATION FOR SEQ ID NO:309:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

GAATTCTGGCC AAAGAGGCCT ACCCTAAAAAC ATTATTTCA AGGAGAAAAG AAAAAGGGGG	60
GGCGAAAAAA TGGCTGGGGC ATTATAGAA AACATGAGCA CCAAGAACGT GTGCATTGTT	120
GGTGGGATTG TGCTCGTGTG CCAAATCATC GCCTTCTGG TGGAGGCTT GATTGCTCCA	180
GGGCCACAA CGGCAGTGTG CTACATGTCG GTGAAATGTG TGGATGCCG TAAGAACCAT	240
CACAAGACAA AATGGTTCGT GCCTTGGGA CCCAACATT GTGGCAAGAT CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:310:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 248 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

GAATTCTGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAAA	60
GGGGGTCTT TTCTTGCCC CTGTCTCTCA CTCAAGATGCG CTCTTTTTC GCCACTGTTT	120
GGCAAAGTT TCTGTTAACG CCCCAGTCT CCAGGTGCGT TACTATTCT GGGATCATGG	180

GGTCAGTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT
ACCTCGAG 240
248

(2) INFORMATION FOR SEQ ID NO:311:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAATAAA CTAATATTGA TGTATTTTA TATTTAATA	60
TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAACTC TCCTAACATT	120
TCTCTTCCTC AGTTTCAT TGTTTGTGAG GAGTAGTGTAG ACATTTGCGA GATTAATTAA	180
GAGTTGGTAG ATACATTCTG GATTTCAATT TACTTTAGAT AGCAGGTTTG GCACCTTAAA	240
TATATTTAAT TCAGTAAGAG ATAACGTAG TATGAGCTGT ATCTCATCT TACTGTTGAA	300
GACATCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG	343

(2) INFORMATION FOR SEQ ID NO:312:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC	60
ACTCCATGCC CTTGTCCGAT GGTTTGCAC TCCGATTTTG CACACCGCTC CACCGTGC	120
CCCAGCGCAC ACCCATTCAAC ACTCAGCCA ACACTCTCGC TGAACACTTT TATAATTGTT	180
AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA	240
TTTACTTTTG CATTGCGGGT ACCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:313:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 354 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGGAGGAA GATGANGCTG AAGATGGAT TCATCTTAGC CAGTTGCTG	60
GTGGTGGGAA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCCC GCGGCCGGAC	120
GACCCAAGCC CGCTGAGCAG GATGAGGGAA GACAGAGATG TCAATGACCC CATGCCAAC	180
CGAGGCGCA ATGGACTAGC TCCTGGGGAG GACAGATTCA AACCTGTTGGT ACCATGGCCT	240
CATGTTGAAG GAGTGAAGT GGACTTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT	300
GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG	354

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 514 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

GAATTCCGCC	AAAGAGGCCT	AGTGCAAGAA	CATGAAGCAC	CTGTGGTTTT	TCCTCCTGCT	60
GGTGGCAGCT	CCCGAGATGT	TCCGTCCCCA	GTTGACACCTG	CAGGAATCGG	GCCCCGGACT	120
GTTGAAACCT	TGGGACACCC	TGTCCCTCAC	CTGCTTGTG	TCGGGTTACT	CCCTCAGTAG	180
TGTTCACTAT	TGGGGCTGGA	TCCGCGAGTC	CCCAGGGAAA	GGACTGGAGT	GGATTGGGAA	240
CATCCATCAC	AATGGTAGAA	CCAATTACAA	CCCGTCCCTC	GCCAGCCCG	GTTCATCTC	300
AGCCGACACG	TCCAGAAGACT	CCCTCTCCCT	GAATCTGACC	TCTGTGACCG	CCGAGACTC	360
GGCCGTCTAT	TTCTGTGCGA	GCGGCCCTAT	TGCTCCCTTT	GAATCGACGA	CTCTAAAGGT	420
GGCCGGAGAC	TTTCACTCCT	GGGGCCAGGG	AATCTGGTC	ACCGTCTCCT	CAGCATCCCC	480
GACCAGCCCC	AAGGTCTTCC	CGCACAGCCT	CGAG			514

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 215 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

GAATTCCGCC	AAAGAGGCCT	AGGACACTAG	AATTATTAGT	GTTCATTTTC	ATCTAAGATC	60
TTTATTCTCT	AACGTTTGT	GTCCTATTGA	AACATGCA	TATGCAAAAC	TACTGCAATG	120
TTAAACCCAA	GAGAAAAGCC	ATTATCATGT	GTATGCTGGT	CATCATGATC	AGTGTGGTAC	180
AATTTTTAAA	AATAAACTAT	CATGCCCTTC	TCGAG			215

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 788 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

GAATTATGTA	CGCCCTCTTC	CTCCTGGCCA	GCCTCTGGG	CGCGGCTCTA	GCCGGCCCG	60
TCCTTGACT	GAAGAAATGC	ACCAGGGCT	CGGCAGTGTG	GTGCGAGAAT	GTGAAGACGG	120
CGTCCGACTG	CGGGGAGTG	AAGCACTGTC	TGCAGACCGT	TTGGAACAAG	CCAACAGTGA	180
ATCCCCCTCC	CTGGACATA	TGCAAAGACG	TTGTCAACCGC	AGCTGGTGT	ATGCTGAAGG	240
ACAATGCCAC	TGAGGAGGAG	ATCCTTGT	ACTTGGAGAA	GACCTGTGAC	TGGCTTCCGA	300
AACCGAACAT	GTCTGCTTC	TGCAAGGAGA	TAGTGGACTC	CTACCTCCCT	GTCATCCTGG	360
ACATCATTAA	AGGAGAAATG	AGCCGTCTG	GGGAGGTGTG	CTCTGCTCTC	AACCTCTGCG	420
AGTCTCTCCA	GAAGCACCTA	GCAGAGCTGA	ATCACCAGAA	GCAGCTGGAG	TCCAATAAGA	480

TCCCAGAGCT GGACATGACT GAGGTGGTGG CCCCTTCAT GGCCAACATC CCTCTCCTCC	540
TCTACCCCTCA GGACGGCCC CGCAGCAAGC CCCAGCCAAA GGATAATGGG GACGTTTGCC	600
AGGACTGCAT TCAGATGGTG ACTGACATCC AGACTGCTGT ACGGACCAAC TCCACCTTTG	660
TCCAGGCCCTT GGTGAAACAT GTCAAGGAGG AGTGTGACCG CCTGGGCCCT GGATGCCCG	720
ACATATGCAA GAACTATATC AGCCAGTATT CTGAAATTGC TATCCAGATG ATGATGCACA	780
TGCTCGAG	788

(2) INFORMATION FOR SEQ ID NO:317:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 214 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTGGCC AAAGAGGCCT AAATCATCCT GATGATGGTT TTCTTACATA AACATGAGCT	60
TCTGACCATG TACCATGGAT GGGTTCTCAC TTCTGCTAT ATCTGATCA TCACTATTGC	120
AAATATTGCA AATTGGCCA GTACTGCTAC TGCAATCACA ATCCAAAGGG ATTGGATTGT	180
TGTTGTTGCA GGAGAAGACA GAAGCAAAC CGAG	214

(2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTTGTCTTTT TTCCCCTTTA TAGCTGCTGG AGTGAATTAGAAGGCCTA AGTCATACAT	60
CACATTGCTT CATGGGCATC CCAGTACACT TTGGATTTTA TTTTACATCC TTACTGATCT	120
GATTCTCATC TCTGTCCTT CATGGTCTCTC TGCTCTCTAG TTACACTGGT GACCTTTCAA	180
AACCTTTACC ACATTGAGTT CATTCCCTAC TTTTCACTCT TTCTCTGCCT GGAGTGTCT	240
GCCCCATCTT TACGTGGCAC GCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA GGCTATCTTC TAGTCAGAT GAGTGATAAG CCAGACTTGT CGGAAGTGGAA	60
GAAGTTTGAC AGGTCAAAAC TGAAGAAAAC TAATACTGAA GAAAAAAAAT ACTCTTCCT	120
CAAAGGAAAC TATCCAGCAA GAGAAAGAGT GTGTCACAC ATCATAAAAAT GGGGATCGCC	180
TCCCAACAGC AGATTTGAC ATTACCTGAG AGTCTTGATT TTAGGTTGT TTTTTGAAA	240
CCCCATGTGTT CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:320:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

GCTGCCGTG	ATGGAGACCA	AACCCGACAA	GGCAGTGTCC	ATCATTGACT	GTGACATGAA	60
CGTGGACTTT	GATGCTCCCC	TGGGCTACAA	AGAACCCGAA	AGACAAGTCC	AGCATGAGGA	120
GTCGACAGAA	GGTGAAGCCC	ACCACAACTGG	CTATGCTGGA	GAGCTGGCTT	TCCGGCTTT	180
CTCTGGATCT	GGCAATAGAC	TGGATGGAAA	GAAGAAAGGG	GTAGAGCCCA	GCCCCTCCCC	240
ATCAAGCCT	GGAGATATTAA	AAAGAGGAAT	TCCCAATTAT	GAATTAAAC	TTGGCGCGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

GAATTCCGCC	AAAGAGGCCT	ACTCTTACAC	CTTCCGCTCC	GTGGGCACCT	TCAATATCAT	60
CGTCACGGCT	GAGAACGAGG	TGGGCTCCGC	CCAGGACAGC	ATCTTCGTCT	ATGTCCTGCA	120
GCTCATAGAG	GGGCTGCAGG	TGGTGGCGG	TGGCCGCTAC	TTCCCCACCA	ACCACACGGT	180
ACAGCTGCAG	GCCGTGGTTA	GGGATGGCAC	CAACCTCTCC	TACAGCTGGA	CTGCCCTGGAG	240
GGACAGGGC	CCGGCCCTGG	CCGGCAGCGG	CAAAGGCTTC	TCGCTCACCG	TGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:322:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

GCGCCGTGTC	CTTTGCGTT	GGTACCCAGCG	GCGACATGAC	GGGGTACACT	CCGGATGAGA	60
AACTGCGGCT	GCAGCAGCTG	CGAGAGCTG	GAAGGGATG	GCTGAAGGAC	CAGGAGCTGA	120
GCCCTCGGGA	GCCGGTGCCTG	CCCCCACAGA	AGATGGGCC	TATGGAGAAA	TTCTGGAATA	180
AATTTTTGGA	GAATAAATCC	CCTTGGAGGA	AAATGGTCCA	TGGGGTATAC	AAAAAGAGTA	240
TCTTTGTTT	CACTCATGTA	CTTGTACCTG	TCTGGATTAT	TCATTATTAC	ATGAAGTATC	300
ATGTTTCTGA	AAAATCGAG					320

(2) INFORMATION FOR SEQ ID NO:323:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

GCAAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCACTCTCT CAGATGGTTT CCAAAAAGAA	60
GCCCAAATT ATCCAGCAAA ACAAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGGAGAT	120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA	180
CAGGAGGGCG CCAGTACCTC GCACCCAAGGC CAGTGGAAACA GAGGACAATA AGAAAGGAAC	240
CAAGGAAAGG ACAAAATGGTG ATATTGTTCC AGAACCGAGGG GACATCGAGC ATAAGAAAGGA	300
ACTCGAG	307

(2) INFORMATION FOR SEQ ID NO:324:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGGAGACG GAAATTCTTG GCTGCCTCGT	60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTCTGGG AGCTTCGAAG	120
ATGGAAAGCC CGTGTCTCTG TCACCGCTGG AGTCCCAGGC ACACAGCCCC AGGTACACGG	180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA	240
ACCGCGCCCT CGCGAGCGAG CTCAGCCTGG CCCAGGGCG AGCCCCACCC ATCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:325:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

GAATTGGGCC TTCATGGCCT ACTCCAAACT CATGCCCTTG TTTTTATCTC TGCCCTGGAA	60
TGGCTGTCTT CTATTTTCAC TCACAAATTTC AACACATTTT GACTTGCTCG TGTCACCTAG	120
GGTTTCCGCC TCAGGTATGT CTTCTTCCTT AATTCTTTG CCGTCTTTGG TGCTGTTGAC	180
CTCACCCCTT CTGGGGTCTT CCTATTGGTC TCAGGTTCAAG GTTGCAGGCC GCCCCCTGGTT	240
TCCTGAACAT TCCTTCTGTG GGGTCTTCCC CTCCCTCTCA CCCACCCCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:326:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC	TTCAGACTTG	AAGTGGAGAA	GGCTACGATT	TTTTTGATGT	CATTTTGTGT	60
AAGGGCGCAG	ACTGCTGCCA	ACAGACTGGT	GATAGCGCCT	AAGCATAGTG	TTAGAGTTTG	120
GATTAGTGGG	CTATTTCTG	CTAGGGGTG	GAAGCGGATG	AGTAAGAAGA	TTCTGCTAC	180
AACTATACTG	CTTGAGTGGA	GTAGGGCTGA	GAETGGGTG	GGGCTCTA	TGCTGAGGG	240
GAGTCAGGGG	TGGAGACCTA	ATTGGGCTGA	TTTGCTGCT	GCTGCTAGGA	GGAGGCCTAG	300
TAGTGGGTG	AGGCTTGGAT	TAGCGTTAG	AAGGGCAAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC	TTCATGNCCCT	ACCTTCCCGT	CCGTTCTTTC	ACGCCTTCCT	CCTCATTTC	60
CTTCCTTCTA	TTTCCCTTC	CCTCTTCCG	CTTCTCTGCC	CCGTTCCCT	CCTCCCTCCC	120
TTCCTCCCTC	CTTCCTTCTC	CTGCGTTCTT	CCTCTCTCCT	TTGTTCTTC	CTCCTCCCTCC	180
CCACTCCCTT	TTCCCTCTCT	CTTCCCACCC	CACTCTCCA	CTCCCCAGTC	CTCCCATCCC	240
CATGGAACAT	ACACCTGCTT	TGTCTGGGAG	CCACGTTATT	CCTGCCAGCC	AGACCCCTGGC	300
CAGGAGGATC	AGGGTCACCG	TCAGCTTGGG	CCGAGAACCC	TTCACATGAG	ACAAGCTCCT	360
CTGCCAGGGT	TTCCCTGTGGG	AAAGGCCCA	CTTCCCGACC	CTCCTGGGCC	ACTGCATGGG	420
GTCCCCCTCTT	CGGCTTCTTC	TCCCCTCTCC	ACCCGGCAGC	CCCCCCAGCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	AAAGAGGCCT	AATTTACTCC	CCAATATAAA	ACATTTTACC	TGCGATCTAT	60
GTGTACATAT	TGAATGATGT	GTAACAATAT	CATAATTTTT	ATGTTCTGCA	TTTTTCACT	120
TATATATCTT	TATTTAAATG	GACTTAACCT	TACTAATGGA	GTAATTTTTA	GCTTTTCAGAA	180
GGAGGTTCTCA	CTCGAAGATA	AAGAACAGCT	CGCTAACCCAC	GAAGAGGAA	TGATGCTCA	240
GCTTTTAGTT	GCACCTCCCTA	AAGTTGCGA	ATTAAGACAA	ATCTTTGAAC	CAAAGAGAA	300
AGAATTCTTA	AAAATGAAA	GAAAAGAAC	AATTGCCAGG	CGCTTGGAAAG	GGATTGAAAA	360
TGACACTCAG	CCCATCCTCT	TGCAGAGCTG	CACAGGATTG	GTAACCA	GCCTGCTGGA	420
GGAAGACACC	CCTCGATACA	TGAGAGCCAG	CGACCTGCC	AGCCCCACAA	TCGGCCGATC	480
AAATGAAGAG	GAGGAAACTT	CTGATTCTC	TCTAGAAAAG	CAAACCTGAT	CCAAATACTG	540
CACAGAAACC	CTCGAG					556

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	AAAGAGGCCT	ACAAAACCAT	CCATAAATAA	ACAAAGCTAA	GAAAGCTAAG	60
AAACAAAGCT	AAGAAACAAA	GAATGAGGTG	AGGGAGATTT	GAGTATTTTT	TTTCTCTCTA	120
CCAACAAGTG	AAGAATTGAA	CACCTTAATC	CATCTGATCT	CCCAGGTGGA	AGCCACAAAT	180
CTTTTTTTTT	TTTTTGCTCA	GCATATTGGC	ACAGTGAGAA	ATTCAATTAA	TACTCTCTGG	240
CATCTCTCTT	GTAAACTCAC	CAAGTCTCAA	TAAGTTCACA	AAGAAGGCAG	AGACAAATAA	300
CCCTAGAATG	CAGGTGATTG	TTTATTATG	TATTTCCCT	GTTACATACC	CACCTATACC	360
CAAGGCCATT	GCAGAAAAGC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 696 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	AAAGAGGCCT	AGGAAGCAGG	AGTTTATTTT	TATCCTTTG	TAAGTATTAA	60
CTCGGTAAATC	ACAACAAACA	CGGAGCAATC	TCATGCTGT	TTATCCGGAG	GACAGTCTGC	120
GGGGTCGTGA	CGATTCTTTT	CTTCTTGAAAG	TTTTTCTTTT	TCCTGAATCT	CATAATGATT	180
CTTGGCCATG	ATTCTGTCTT	TCATGACT	GTGGCTTCTA	CTCGAACAAAG	ATCCTTTCCG	240
AGGAGTGGCT	TGCCAACGAG	CGTGAAGTTG	TCTGCCCAA	CCAGCAGGAC	CTTCTCCAGT	300
CGAATTCTCT	CTCCACACCG	AAGGTCTAGT	TCATTTCAA	TTAAGATCAG	GTCTTCAGAG	360
GTCACCTTCC	ACTGGCGGCT	GGCAAAGTGC	ACCACGGCAA	AGAGCCTGCC	ATACTGCC	420
GTGACGATCA	TCTCATTAC	TTTCTTCACG	ACCTCTGCAT	GGTGTCTGGT	CTCCCTCAACT	480
GGGTCTGGCA	GAACAACCTTC	TGGCCAAGGT	GGTGAACCTCA	GGGATGTTT	AGGAACATAT	540
CCTGGTAGAT	ATGAAGTGT	CTGTGAATTG	AACCTTCGAG	AAGCAGACCA	AAGGGAGGCT	600
GCTCCGGGCC	CCGAAGGTCT	CAGGATGCTG	TGGCTGCACG	CGGACGCCAG	CGGCCCTAAAG	660
GTGACCGTCA	GGGAAGATGC	TGCCATGGCC	GGCC			696

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 378 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAATTCGGCC	AAAGAGGCCT	AATTTTTTGT	ACATCTGGC	CCTTAGTTTT	TATTCTGTTT	60
ATTATATGTC	TCTGTCTCTC	TCTATTGTTG	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	120
GTGTGTGTGT	GTGGTGCAGG	AGTGCCACCC	CCAGGGCCCT	GTCAACCTCT	CTTTCTCCCT	180
CCATGGCTGT	CTGCCCTGGT	ATCTGCTCT	GAGAACCTC	GGGGCGGTCA	GGGGATGTCA	240
GGAGGGGAAG	GAGCCGCCCT	CCCTATCTG	CTGCTCCCT	TGGCACTCAG	GGGCACCTTC	300
CATGGAGCCA	GACCGGGTGG	AGGGGCTTCT	GGGATTTGGT	GTCTGCTGCT	GCCAGAGCAG	360

GAACCCCCAG TACTCGAG

378

(2) INFORMATION FOR SEQ ID NO:332:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

GAATTGGGCC	TTCATGGCCT	ACATTGGGAT	TATTGGTGC	GTGACCAGG	CTGGCATCAT	60
GGCGGAGAC	AGAAAGTGAAT	CACCTAAGTT	GACCCAAAGAG	AGAGCCAACCC	TGAGCGATGA	120
GCAGTGACCA	CACGTGACCA	CCTTGTCGA	GTGTTTCAT	TCCGTGAGTG	AGCAGTCTCC	180
TCAGGCTCT	GCACATTACT	ATGATGAATT	TGCAACCTG	ATCCAACATG	AAAAGCTGGA	240
TCCAAAGCC	CTGGAATGGG	TTGGGCATAC	CATCTGTAAT	GATTTCAGG	ATGCTTCGT	300
AGTGGACTCC	TGTGTTGTC	CGGAAGGTGA	CTTTCCATT	CCTGTGAAAG	CACTGTACGG	360
ACTGGAAGAA	TACGACACTC	AGGATGGACT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:333:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 547 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

GAATTGGGCC	AAAGAGGCCT	ACTTATTTTC	CTGTGAAAAT	GCCTACCACA	AAGAAGACAT	60
TGATGTTCTT	ATCAAGCTTT	TTCACCAAGCC	TTGGGCTCTT	CATGTAATT	TGCTCTATT	120
TGGGACACA	AGCATGGATC	ACCAAGTACAA	TTGCTGTTAG	AGACTCTGCT	TCAAATGGGA	180
GCATTTTCAT	CACTTACGGA	CTTTTCTG	GGGAGAGTAG	TGAAGAAATTG	AGTCACGGAC	240
TTGCAGAACCC	AAAGAAAAAG	TTTGCAAGTT	TAGAGTACT	GAATAATTCT	TCCCAAAAAAA	300
ACTCTGCATT	CGGTGACTAT	CCTGTTCTG	GTCCTGAGTT	TGATCACGTC	GCTGCTGAGC	360
TCTGGGTTTA	CCTTCTACAA	CAGCATCAGC	AACCTTACC	AGACATTCT	GGGGCCGACG	420
GGGGTGTACA	CCTGGAACCG	GCTCGGTGCA	TCCTTCGTT	TTGTGACCAT	GATACTGTT	480
GTGGCGAACAA	CGCAGTCCAA	CCAACTCTCC	GAAGAGTTGT	TCCAATGCT	TTACCCGACT	540
CCTCGAG						547

(2) INFORMATION FOR SEQ ID NO:334:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GAATTGGGCC	TTCATGGCCT	AGGGGAAATT	GAGTCAGGAA	AAGGTTCAAT	ATTTTTTAAT	60
GGTAGAATTG	ACCGTATGTG	TATGTGCTTC	TAGAAGTGT	TCAGGAGAGA	GGGTGGAATG	120

GATGGTGTGG GACGGAGGGA AGAATTGGTG GAATGATGTT GGCAAAAAGG AATAGGCTTT	180
TCTGCATAAG TTGAGGGATT GGCTTGCCCT AGAAACATGG ACAATTGCGTC TATAGTAAGA	240
AGAGAAAAGG TAGATCTATG ACCACAGACA TAGTCAGATA ATCATTAA AATTCTTAA	300
TCATAGATG TTTCTGATGT ATGGCAGGCA GTAAGCTAAG CAGTTACAT ACCTGATTTC	360
ATTTAGTTAT TATAACAATC CCAGTCTAAA ACTCGAG	397

(2) INFORMATION FOR SEQ ID NO:335:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAAATCGGCC TTCATGGCCT ACTCCATCCT TAAGGTCAACC ATTGGTATGTT TCCTGCTCTC	60
TGGAGATCCC TGCTTCAGA CGCCACCATC GACTGCCAAG TCCATCTCCA TCCCAGGCCA	120
GGATTCCTCC CTGCGAGCTGA CGTGTAAAGG TGGTGGGACC AGCAGTGGGG GCAGCAGCAC	180
CAACTCCCTG ACTGGTCCC GGCCCCCAA GGCTCGGCC ACTATTCTCA GTCTCAGGGCT	240
GCCAGAGGAA CCCGACCAGA ACCTGTCCAG CCCTGAGGAG GTGTTCCACT CTGGCCACTC	300
CTCGCAACTC GAG	313

(2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 467 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTGGCCCTCC CAAAGTGCTG	60
GGATTACAGG CTTGAGCCAC CACACCTGGC CTAGTGATT GTAAATTTCAT GAGCTGTTGC	120
TGTATTGCCT TCCACAGACA GTCAATTAT AATCCTCTAG TATTATATAA TCAGGAAGAT	180
TCAGTGAATG GAATTTGGG TTGGTGGAGG ACATATTTTT TAATTGGTAG ACCACTGAGT	240
GCTTTGCAA ATCTCCTTAA ATCACATTAC AGCAGGAACA ACTATAGAAA ATACAATTAT	300
TTAGGAGCAA CCTGATCTGT GAGCTAATT AATGAGGTGGA GCCCAGCCTA CATGCTGAAG	360
AGCTCACATG CCTCCTACCT AGTTCCCTAA CTAGGTTTC ACTCATGCCC ATTTTGTCAT	420
ACTCTTGAAA CCTTCCTATC TTTGCATAGA ACATTATTCT TTCCACT	467

(2) INFORMATION FOR SEQ ID NO:337:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

GAATTCGGCC AAAGAGGCCT ACTTCTTGA AGAACCATGA AGTCACACTA TATTGTGCTA	60
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GCTCTAGCCT	CCCTGACGTT	CCTGCTGTGT	CTCCCCGTGT	CCCAGAGCTG	TAACAAAGCA	120
CTCTGTCCA	CGCATGTGAG	CAAATGCCCTC	ATTCAGGAGC	TCTGCCAGTG	CCGGCCTGGA	180
GAAGGGAACT	GCCCCCTGCTG	TAAGGAGTGC	ATGCTGTGCC	TCGGGGCCCT	GTGGGACGAG	240
TGCTCGGACT	GTGTCGGTAT	GTGCAACCTC	CGGAATTACA	GCGAACACCCC	GCCCCACATCC	300
AAGAGCACCG	TGGAGGAGCT	GCACGAGCCC	ATTCCGTCCG	CTGTCGAG		348

(2) INFORMATION FOR SEQ ID NO:338:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

GAATTCGGCC	TTCATGGCCT	AGCCAGTCTT	CAGTTATAAC	CACTCCACCC	TCCTCACTTT	60
CTCTCTCTCT	CTCTCTTTTT	TTTTTTTCTT	TTTTTTGCTA	TGGGATTAA	TGGAAAAAT	120
ATGTAAAAAC	TGTCACTAGT	CAGCTGGCTC	TTTTTCTTAT	GAAATCTATC	AGTACCTTTC	180
TCCATCCGTT	GTTCTCAATA	ATGACCACAG	AGCCTGAGTA	TACCAAGAAA	ACCAATATTC	240
GCATTACAGG	TCACTCGAG					259

(2) INFORMATION FOR SEQ ID NO:339:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 183 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

GAATTCGGCC	AAAGAGGCCT	AGCCTCTGC	AAGATGCTTC	TGATTCTGCT	GTCAGTGGCC	60
CTGCTGGCCT	TCAGCTCAGC	TCAGGACTTA	GATGAAGATG	TCAGCCAAGA	AGACGTTCCC	120
TTGGTAATAT	CAGATGGAGG	AGACTCTGAG	CAGTCATAG	ATGAGGAGCG	TCAGGGACCA	180
CCT						183

(2) INFORMATION FOR SEQ ID NO:340:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

GAATTCGGCC	TTCATGGCCT	AGTTTTAACT	GAGTCAACA	AGTATTTCTG	TTAAGAGATT	60
TTTTTCGTA	ATTTACCAATT	CTGCTGAATC	AATTTTAAT	CCAGTTGGAA	GCTCTAAAAT	120
TCTAACATAA	TTCAGAAGCA	TTAAAAAAGA	AGACTAAGGA	AGAGAAAGCT	ACATTTTTAT	180
TTCAGCTTGT	ATTGCATTGT	GCAGAAAGGA	AAATAGTCTA	GCTAATTTAC	TTTCCTATG	240
AAAAACCTTA	GAAGGCTCCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

GAATTGGGCC	TTCATGGCCT	AGCCTTCTA	GTCTCCCTC	TTCTGTAGGA	ATANCATGTT	60
CCTCAATGG	TCTCGAACCT	TTTCACCAT	TTGGTGAAACC	CTTTAAAGT	AAATTTACTC	120
AATGCTTAA	AATTCAAGT	CTTAAAATAA	ATGTGAATT	TGTTTCCAGG	TATTTATTCT	180
GGGGTACAAA	AACTTCCCAG	ATTTTACAGT	AGGAAAGGAA	ACCCCTTTAT	GATGTGGCTT	240
ATTATTACAA	GCATTCAAGAA	ATGATGCTGG	CTAAGTCAA	TCATTCCTTG	AGACAGTGAT	300
TCTTAATGT	AAIGCCGCT	TCCTGAACTC	TCACATATT	TATATCATGG	TTATTTAAA	360
AAATATATTT	TTAGCCCTTT	GTAACCTTAG	TCTTGTTTG	AGCAATCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

GAATTGGGCC	TTCATGGCCT	AGGGATTATA	GGTGTGAGCC	ACCGCGCCG	GCCAGGAATC	60
ATTTTTATCC	AGGTAAAGCA	TACAGAACCG	GAGGGTCTT	GTCTAAGTTG	TACCATGAAT	120
GTGTGCTCAG	TGGCTACTTT	GAATAGACT	TACTGTACAA	TCCCTGAGCA	GGAAATGAAAA	180
TAAAAGCTGG	AAATCACGGG	TTGCTCTGGG	GTTCAGGA	AGGTGTGCTC	CGTCCTGGGT	240
GAGTGTCTC	CTTTCTCANG	GGATTTCATG	TGGCATATT	TTGTTTCAT	CTGAGAGGCA	300
ACATAAGCTG	GGAGGGAAGG	GCTGCAAAGA	GGGGCCAGG	ACAAATGTGT	ACCTGGGGGC	360
CCCCATTTG	ACTCCACCT	GAGCTGGGC	TGGGCCACAG	GAGGGCAGAG	GGAACACTTT	420
GGGACGGGGA	GGGAGCCCCCT	GGACTGAAAG	AATGGGTGA	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

GAATTGGGCC	TTCATGGCCT	AGAATTGG	AGTCTTATC	ATAGGTAACC	TGGACCACAG	60
TTACTATTTA	TTGACATGT	GATTGAGTGT	ATGGAGAAA	GCACAGTGG	TGCTAGGCTT	120
TGAAATATG	GGGATGTAGA	AAAGCAGATA	GTTCAGTGC	TACCTTTTC	TAGAACTACC	180
TTGAACCTTA	AATTTTAAGT	CATGTTCATT	GCTAGAAAAT	TAAATGTACT	TATTAACACC	240
AATGAAAAAG	CACATTCTG	AAATGAAGTT	AGAGATAATC	TCTGTGTCTT	ATAAAAAGAC	300
ATTAATAAAA	ATCTGGTAAG	GACTCGAG				328

(2) INFORMATION FOR SEQ ID NO:344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC	TTCATGGCCT	AGTGACCAAGA	CATAAGAACT	CATTTTAGT	TAAAGCATTT	60
TAAAAAAAGTA	TACAAGGCAG	AGTTGCAAC	AATCTCAGCC	TATGAAAAGG	ACAGCTGCAG	120
TCAATGTTCC	CACTAATATT	TTCCATCCGT	GTACTGAGTG	AATTCTAAT	GTGCAACTCA	180
TGTCAAGAAA	ATAAACAGAT	GTGCACCACA	AGCGGAACAA	CAATGAAAGA	ACTTACATAG	240
ATTTTTATTA	AGATTGAACT	TTTGATGTTG	ATTCCACTGG	TAAGAGAGCA	CTGTAGGCAA	300
AGGTCTTGTG	TTTATAAAAGT	TATCTCCAT	TGAGGAAGAT	GAAGATGTCA	ATACTCCCCA	360
ACAGAAATGCT	TTGAGCTCTT	TCTAGTAGAT	CTGTGCCAAC	TCTGAAACAC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:345:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC	TTCATGGCCT	AGTAAATACA	AAATACAAAA	ATACTGGTGA	GAGAATGGGA	60
TGATGATTAT	ATTCCTGGTT	CAGTTTTCT	TCCTGAGAAA	TTTGATAATA	CATCTTTTGA	120
TTTTTAATAA	GTGAAATAAC	TGGTGACTGT	GTGTTATGTG	TGTGTGTTG	TTTTTTTTT	180
TTTTTTAAA	TAGAAGTGTG	AAAAGAAACT	TCATCCACGG	AAACTTCAGG	ATAATTTGAA	240
AACAGGCAAG	TCATTCCTA	TCTTTTATA	ATCTCTGCCT	TGTGGGATT	GGTTTGGTTT	300
ACCTAACTTT	GATTTTAGTG	GGAGTATGTG	AGCTGTGACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:346:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 544 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC	TTCATGGCCT	AGCCTTCGGA	ACCCCACCAAG	AGTCACAGCC	AGGAAGGGCA	60
GCGGGGGCGA	CCAGGCCGAA	GGCTCACGCC	ACAGGGAGGG	CACCTAGGAC	ATGGGGGGAA	120
GCGCGTTAAA	CCAGGGAGTC	CTGGAAGGGG	ACGACGCC	CGGCCAGTCC	CTGTACGAGC	180
GTTTAAGTCA	GAGGATGCTG	GACATCTCGG	GGGACCGGGG	CGTGTGAAAG	GACGTCTAC	240
GAGAAGGGAC	TGGAGACCTA	GTGGCGCTG	ATGCTTCCGT	GCTAGATGCT	TCGTCTTGGG	300
TAAACTCCTC	GACTCCCAAG	GCCCCAGCTC	CATCTTACC	TCAGAGCCTC	CTGAACCTCC	360
TCCTCCAGCC	TCACCTCCT	CCAGCCTCAC	CACTCCCTCC	TGGACCTGCA	GCTCCGCA	420
CCGGGGGGCC	TCAGAACTAC	CCCTTCCAGG	GCCTCAGAAC	TACCCCTACG	GTTCCTCCTG	480

CGTAAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGG CTAGAAACCT CGAG	540 544
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(2) INFORMATION FOR SEQ ID NO:347:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG CCTACCCAGT GATTGTCACC ATGGCCAGCA AGAGGAAATC CACCACACCA TGCATGATCC CAGTGAAGAC TGTGGTTG CAAGATGCCA GCATGGAGGC CCAGCCCGCT GAGACCTTGC CTGAAGGACCC CCAGCAGGAT CTGCCCCCAG AAGCATCTGC TGCCAGCAGT GAGGCAGCAC AGAACCCCGAG CAGTACTGAT GGCTCTACAC TGGCCAATGG GCATCGGAGC ACTTTAGATG GCTATTATAA TTCTCTGAA TACTGGCATT TCAGATCCCA TGACATGACC CAATTTGTGG GACATATGAA CTCAGAGCAC ACAGACTTTA ATAAAGACCC AACCTTGTA TGCAGTGGGT GCAGTTTCTT GGCAAAAACC CTCAGGGGGC TTTCTTGCA CAATGCCACA TGTCACTCCG GGGAAAGCCAG CTTTGTGTGG AACGTGGCCA AGCCAGACAA TCATGTGGTT GTGGAGCAGA GCATCCCTGA GAGCACAGAC ACTCCTGACC TAGCGGGTGA GCCCAGTGCT GAAGGGGCTG ATGGACAGGCC AGAGCTCGAG	60 120 180 240 300 360 420 480 540 570
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(2) INFORMATION FOR SEQ ID NO:348:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAAAAAAAGT TTTCAAAGGG AAGTAATCTT AAATCTGTAT ACTATTTCT ATGATGGAAA TTCTGTGAAG AAACAATAAC AAATTCTCCC TGACTCCTGT CTGTCCTAAT AGTAAGGTGG TCTTCTCTT AATCTCCCA TCCATCCACC CATCAGGAAG CAACAGGGTA CCTTGTGTGA GTAACTGTAG ATTTCTGACT TCTTCTCGCA CCTTCAGCTG GAGCACCTGT TGTAAAGATGT GCTGCCGGAG GTTCTCTGG GCAATCCCA TTGCTCGAG	60 120 180 240 300
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(2) INFORMATION FOR SEQ ID NO:349:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 424 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGGCC TTCATGGCCT ACAACCCACC ACCACCTGGA CGCCAGCAG CACAACCACC ATAGCCGGCC TCAGGGTCAC AGAAAGCAA GGGCACTCG AATCATGCCA CCTAAGTCTG GACACTGCCA TCAGGGTTGC ATTGGCTGTC GCTGTGCTCA AAACTGTCTAT TTTGGGACTG	60 120 180
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CTGTGCCTCC	TCCTGTGGTG	GAGGAGAAGG	AAAGGTAGCA	GGCGCCAAG	CAGTGACTTC	240
TGACCAACAG	AGTGTGGGA	GAAGGGATGT	GTATTAGCCC	CGGAGGACGT	GATGTGAGAC	300
CCGCTTGTA	GTCCTCCACA	CTCGTTCCCC	ATTGGCAAGA	TACATGGAGA	GCACCCGTAG	360
GACCTTAAA	AGCAGAACCC	GCAAGGCAGA	AGGAGGCTGG	GTCCTGAAT	CACCGACGCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:350:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC	TTCATGGCCT	AATTAGATTA	TTTTGAGCTT	GGGAACACTT	GTACATGGTT	60
CCCCGGGACA	TAAATGTAGA	AGTTCTGTA	AGCACTATCT	TCACATTGAG	GGATGTGAAG	120
GCTTTCAGA	GTATAGATAG	TTTAATGTA	TTTAGAGTTC	TTCATTATCT	TTCCTAGGAT	180
CAGATATCTG	CCGATGATGA	CTTCTAACCC	ATTCAGAATC	TTTCTATGGT	ATATTGCCCT	240
GGGGTGTAAA	ATCCTCCAGG	ACCCCTAAACA	GATGGACAGT	TGATGCATT	CAGGGTAAGC	300
TGTAGACAAAC	AATATATTG	ACCCCTGAAA	CAATTTCAGTA	TGCTTGTCAT	TTGTTAACTA	360
GAGTTATTTC	AAACATAATT	TTGAAATAAA	AATAAATT	AATAAATACA	TGTTCCCAAT	420
TATGCATATA	AAAGCAATCC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:351:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

AATTTCGGTTC	ATGGCCTAAT	TTTGGAACTA	AGAGACAGAT	TTTTTGTGTT	TGTTTTTTTA	60
ATAGCTGTT	AACTAGTC	ATAAGGACAA	AATACAGAAA	GACAGTTCTT	ACAGAGAAAT	120
AGAAGCAAA	AAAGGAACCA	ATGGAAAATT	AAAAGTCAA	AAATAGAATA	TCTGAAATAA	180
AAAATTCACT	AGATGACATA	ACTGTTGAGG	AAAGAGTATG	TGAATTGAA	GAAAGAGCAA	240
TAGAAATGTT	CCATTGTAAA	GAACAAAGAG	AACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:352:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGGCCT	TCATGGCCTA	CAGATTATCT	TACACTGAAC	TGATCAAGTA	CTTGAAAAT	60
GAATTCGAAA	TTTATCTGG	TGTCTTCAT	ACTTGCTGCA	CTGAGTCTTT	CAACCACCTT	120

TTCTCTCAA	CCAGACCAGC	AAAAGGTTCT	ACTAGTTCT	TTTGATGGAT	TCCGTTGGGA	180
TTACTTATAT	AAAGTTCCAA	CGCCCCATT	TCATTATATT	ATGAAATATG	GTGTTCACGT	240
GAAGCAAGTT	ACTAATGTTT	TTATTACAAA	AACCTACCT	AACCATTATA	CTTTGGTAAC	300
TGGCCTCTT	GCAGAGAAC	ATGGGATTGT	TGCAAATGAT	ATGTTTGATC	CTATTGGAA	360
CAAATCTTC	TCCTTGGATC	ACATGAATAT	TTATGATTCC	AAGTTTGCG	AAGAACGAC	420
ACCAATATGG	ATCACAAACC	AGATGGCAGG	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:353:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 295 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCTGGCC	TTATGGCCTA	GCAGGGGCCA	AGGTAACATG	AACAAACAGC	TGCTTGCTGC	60
CCCCAAGCTT	TAGTTCTAG	TGGGCTGG	GCAATTGTGA	AGGACAAC	CACCCAAGGC	120
CCAGTATTGA	AGAGGGTAG	GGTGGGAGGA	TTGTACATAT	CGCGAACGCT	TGGCAAATCT	180
CTAGATTTTT	TTTCTCTCTA	GGAAATAATA	ATTTTTAAAA	AGCCTTGAA	AAAATAATAA	240
AATGTTTCAT	GACAGCAGCA	GATGTAAAC	TCCCAGTACT	CGGGCGACC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:354:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 414 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GCCTAGACAT	GATGGTGGCC	ACGTGCCAGG	GGACCACACC	CTATGTACAA	AGCAGGAGAA	60
TGATGCTCCC	AGCTGAGCTG	CAGGATGGC	GCTGGGCTGA	CTGGAGGGGT	AGACGGGGTG	120
GGGTCTGACC	CCATTAGCCT	TTCCCATCC	AACCTGGCC	CCCATAAAGCC	ATTCTCTGCC	180
CCTCTGCACA	AGACAGACTC	AGCAAATCTG	CGAGGTATGG	GGATTCTGCC	AACTCCCCAC	240
CTCGCCTCAC	CTTCCCTAGG	TCTGCGCGT	AGGAGATTCT	GGAGCCAGAG	GGAGAGACCC	300
CAGAAACTCC	CCGGTCGGCG	ACCCAGCCCG	AGACGCCCTGG	GGTCCAAGG	GAAGCTGAAC	360
CCCCCGCAGAA	TGGGAAATG	GAGAGAGAAC	CTGAAAGAGC	CCCTGTAACT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:355:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 443 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCTGGCC	ATCATGGCT	ACTCCGAGT	AGCTGGGACT	ACAGGCATGT	GCCACCACGC	60
CCAGCTAATT	TTTTGTATTT	TTTTTAGTAG	AGATGGGGTT	CCACCATGTT	AGCTAGGATG	120

ATTCGATT	CCTGACCTTG	TGATCCGCC	GCCTCGGCCT	CCCCAAATGC	TGGGATTATA	180
GGTGTGAGCC	ACCACGTGGC	CTCATTCAT	TCTTTCATGT	GGATAGGCAG	TTGTTCCAGA	240
AGTATATAGT	GAGGAGCTTC	TTCTTCTCT	AATGATCTGC	AATGTCACCT	TCATCATT	300
TGAAGGTTGC	ACATATACAT	GGGAATT	TAGTCGGCA	TTAAATGTC	TTCAAAAGAG	360
TTCCCTGCAA	CGTTTTGTT	TTTATTCCT	ACTGTCCT	TCACGTACTC	TCTACTGAAC	420
TAAACTCTCT	AATGTGTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:356:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCTC	AAGAGCAGCC	CACCTGTTCA	GTATTCA	60
CCACATATCC	ATAATAGAGC	TCTTCTCTTC	CCCCGGGTT	CTCTGCCTCA	GCCTTTCC	120
CTTAGCAGAT	GCCATCTGCA	GGGCCACTTG	GCTGCCGTA	GCAGTAACCG	CACAGTCTTC	180
CACATTTACT	CCCTCAGCT	CAGCTGCTCC	TGCAGCCCAG	GCACTGTCTC	TGTCTCTGCA	240
TTGCTCAAGC	CTCCACCAC	TCGGTTACAC	CCCACAGCCA	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:357:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

GAATTCGGCC	TTCATGGCCT	ACTGCCTTAG	CCTCCAAAG	TGCTGGGATT	ACAGGCGTGA	60
GCCACCATGC	CCAGCCCTAT	AGTAGTTCTT	CTTTTGGCCC	TTAATATCCT	CACCCACATG	120
TCCCTGTACCC	TGCCCTGAACC	CTCCTCTCT	TTTTGGTCTG	ATCTTGAGC	TCCCTAGAGC	180
CCATAATTCT	TTAGAGCAGG	TATGTCCCGA	GTCTGAAACA	TGCCCTTATT	TGTCCCAAGC	240
TCTGGACATT	TCTCACCCCA	TCTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:358:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

GAATTCGGCC	TTCATGGCCT	ACCAAGGAAG	CCTTCTGTT	TTTGGCCCAA	GGAGCGTCAA	60
TAAGATCTT	AAAATACTT	TGAAGTCATT	TTGTGTTG	GTATGTGCAT	ACACACCTGA	120
TTTGTGTTAT	TTTTTATT	TATTTTTG	GTTAGGGTCT	GGCTCTGTCG	TCCAGGCTAG	180
AGTGCAGTGG	TGTGGTCTCA	GCTCACTGCA	ACCTGTCCT	CCCAAGGCTCA	AGCCGCC	240

CCACCTCGAG

250

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCCGCC TTCATGGCCT AATGGGAGAT TGGTGGGAGT AGGGAACACA AAAGGCATGG	60
AAAAAGAAAGA TAGGTTGTAT TTTGGTCATA CTGACACCAA CATGCCTAAA GGATAGCCCT	120
GTGAAAAAAG CTAGCAGACA GTTGAACATGC GGCTGTGAAA CAGGAAGCCG TGAGGGCTAG	180
ACTCATCGTT GTAGTCATTG GTAAAGAGTA AATACTTGGA GCTATTGTAG TAGATGGTAT	240
CACCACGGAA CACTCGAG	258

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GAATTCCGCC TTCATGGCCT AGGAAGCCAC AGGTCGGCTC TGCAATTAGCA GGAGCAGCCG	60
CCCTCGCTGG CCGGGGGCTC CTGGGGTTTG TCCAGCTTGA TGTCGATCAT CCCTTCTTTG	120
CTTTTCTCCT GGACATTCTC CATTCCGGGT AGAGCCGACG CCACACGTCG AAAAAGCTGC	180
TTCACGTTGT AGCCAGTCTT CGCACTGTC TCAATGAACA TGACGCTAG TTCTTTGGCG	240
CGCTGCCCGC CCCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GAATTCCGCC TTCATGGCCT AAAGATTAGC CTGGGTAACA TAGTGAGACC CTGTCTCTAT	60
TAATTAATTA TAATTAATTA AACATTCA TTGGTATTGT TCACAAAGGT ATTGGTTGTT	120
AAGGCATTCA TTAAGGTATT GTTAAACTT GTGTTAACCA TGTTAAAGTC TCAGTAACCTT	180
TGGGATAGAA ATAAATGTG ATAAAAAGCT GAAAGAAC ACCACAAAGGG AGAGTCCTTT	240
TTGAAATATT AGAGACATAA TGCTGTCTAA TAAAGAACCA CATCAAAGAA AACTACACT	300
ACAGTGACTG CAGACTTAAT GTTGGCAAC CATGCATCCT CCCTAGAAAT GCATTTGAAT	360
TTGATTTACT AATCTTTAT TTAGGAAATT TACATTTTA CATTAGTGAG ATTGGCCTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:362:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 288 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

GAATTCCGGCC TTCATGGCCT AGTTATTCTT CTAATAGCTC AGCTACTTTT CCTTAAAATA	60
TCTTTTCTC TGCAAAGCCT TCATATAATT GTTGTATTA TAACAGTGAT GATGACTGCC	120
ACTCATTACA ACTGCTGTTG TTAATCTTG TTGTTATTT AAACCATATG TTATTTAAC	180
CATAAACTGC ATCATAAAAG CAGTTCTTT CTAATCCATG ATGACACCTG CTAGCCAGGT	240
ATCGTATCAA TTCTTCACAG GTCTATTGAA TTCTAGACCT GCCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:363:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

AAAAATTTCA ACAAAATCCTG AAGTCTTCT GTGAAGTGAC CAGTTCTGAA CTTTGAAGAT	60
AAATAATTGC TGTAAATTCC TTTTGATTTC CTTTTCCAG GTTCATGGTC CTTGGTAATT	120
TCATTCTATGG AAAAAAATCT TATTATAATA ACAACAAAGA TTGTATATT TTTGACTTTA	180
TATTTCTCTGA GCTCTCCTGA CTTTGAAA AAGGGTGATG AAAATGCATT CCGAATCTGT	240
GAGGGCCCAA AACAGAGACT CGAG	264

(2) INFORMATION FOR SEQ ID NO:364:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

GAATTCCGGCC TTCATGGCCT AGACCCCTCAT CAATAGATGG AGACATACAG AAATAGTCAA	60
ACCACATCTA CAAAATGCA GTATCAGGCG GCGGCTTCGA AGCCAAAGTG ATGTTGGAT	120
GTAAAGTGAA ATATTAGTTG GCGGATGAAG CAGATAGTGA GGAAAGTTGA GCCAATAATG	180
ACGTGAAGTC CGTGGAGCC TGTGGCTACA AAAAATGTTG AGCCGTAGAT GCCGTCGGAA	240
ATGGTGAAAGG GAGACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:365:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GCGCCTATCA CAAGCAGATC ATGGGTGGCT TCAAGGAGAC GAAGGAGGCT GAAGATGGCT	60
TCCGCAAGGC CCAGAAGCCT TGGGCCAAGA AGATGAAGGA GCTGGAGGCA GCCAAGAAGG	120
CCTACCATTT GGCTTGCAAAGAGGAAAGC TGCCATGAC ACGGGAGATG AACAGCAAGA	180
CGGAGCAATC GGTCACACCT GAGCAGCAAA AGAACGCTGCA GGACAAAGTG GACAAGTGCA	240
AGCAGGATGT GCAGAAGACA CAGGAGAAGT ATGAGAAAGT GCTGGAAGAT GTGGGCAAGA	300
CCACACCCCCA GTACATGGAG AACAAACTCG AG	332

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTAACAG AGTTTCAGA ATTAGAACAC TCAGAAATGG GATCATCGTT CAGTGTCTCT	60
CCAAAAGCAG AATCTGCCGT AATAGTAGCA AATCCTAGGG AAGAAATAAT CGTAAAAAAAT	120
AAAGATGAAG AAGAGAAGTT AGTTAGTAAT AACATCCTTC ATAATCAACA AGAGTTACCT	180
ACAGCTCTTA CTAATTGGT TAAAGAGGTT GAAGTTGTGT CTTCAGAAAA AGCAAAAGAC	240
AGTTTTAATG AAAAGAGAGT TGCACTGGAA GCTCTTATGA GGGAGGAATA TGCAGACTTC	300
AAACCATTG AGCGAGTATG GGATCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GCGATTGAAT TCTAGACCTG CCTCGAGTAC GGAGCGAAC TCTGTCTCAA AAAAAAAAAA	60
AAAAAAAAAA ACCGAGTATA AAAGGCATT TTTCCCTTA AACTAAGTAA ATATAATGTT	120
TGAATAGTTC TATTTTGCTT AACGGGCTTT TGTTATTTGT TTGTTGTAGA AATTGGCATT	180
TTTCACATAG AAATCTCGAG	200

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCCGGCC	TTCATGGCCT	AGAGAAATGA	GGAAAAAGAA	GGAAGAATAT	TTAACCTTTA	60
GTCCTCTTAC	AGTTGTAATA	TTTGTTGTCA	TCTGCTGTGT	TATGATGGTC	TTACTTTATT	120
TCTTCTACAA	ATGGTTGGTT	TATGTTATGA	TAGCAATTTT	CTGCATAGCA	TCAGCAATGA	180
GTCTGTACAA	CTGTCTTGCT	GCACTAATTC	ATAAGATACC	ATATGGACAA	TGCACGATTG	240
CATGTCGTGG	CAAAAACATG	GAAGTGAGAC	TTATTTTCT	CTCTGACTG	TGCATAGCAG	300
TAGCTGTTGT	TTGGGCTGTG	TTTCGAAATG	AAGACAGGTG	GGCTTGGATT	TTACAGGATA	360
TTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:368:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCCGGCC	TTCATGGCCT	ACATTCGGAG	AAAGTGAAAG	AATTACACCC	AGAACACCCA	60
TGTCTACCAT	GTACTACAT	TTGTTGTTGT	GTGTTGTTGT	GTGTTGTTGT	GCGTGTGCAA	120
TTTTAATTAC	AATGGTCGAG	GAAGCTTGTG	CTGAGAAGGT	GATGTTGAAT	AAAGACTCTA	180
AAGACCTAA	AGAGTTGAGA	GAGAGCTGTG	TGGAGTTCTG	GGGCCAGGC	ACAGCAAGTA	240
CAAAGATCCT	GAAGCAGGAG	CATTCTGGT	GTGTTCAAGG	AAAGCAGGAC	AACCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:370:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCCGGCC	TTCATGGCCT	ACCGCCTTTC	CATTATGCAA	CTGTGGTGGC	TTTCTTTTG	60
TTATACGACG	ATTATTTGTC	AACCCCCTA	TCTTGTCACT	CAACCATGGG	CCCCCTGGGC	120
TCAGAGACCT	CTGTGACGTC	ATCTTCTCAT	CACCCACATCT	GCAAATGTGT	GGGTGGATGG	180
GGCAGCAACA	GTCCACCTCC	TCCAAGAAGC	AGTCCCTGAT	TTTCCTCCC	CAGACAAATC	240
TTCGTCCTCTC	TGTTCTTGGA	AACTCAAGA	ACTAAGCACC	TCCCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:371:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 540 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

AATTGGGCCT	TCATGGCCTA	CAAGCTCGAT	CATTATCCTT	CTGTGAGTTA	CCATCTGCCA	60
AGTTCATCCG	ACACCCCTT	CAATTCTCCC	AAAGTCGCTCT	TTCTGGGAAA	AGTTATAGAA	120
ACAGGGAAAAA	TTGACCAAGA	GATTCAACAA	TACAACACCC	CAGGATTCA	TGGTTGCCTC	180
TCCAGAGTC	AGTTCAACCA	GATCGCCCC	CTCAAGGCCG	CCTTGAGGCA	GACAAACGCC	240
TCGGCTCACG	TCCACATCCA	GGGGAGCTG	GTGGAGTCCA	ACTGCGGGGC	CTCGCCGCTG	300
ACCCCTCTCC	CCATGTCGTC	CGCCACCGAC	CCCTGGCACC	TGGATCACCT	GGATTCAAGCC	360
AGTGCAGATT	TTCCATATAA	TCCAGGACAA	GGCCAAGCTA	TAAGAAATGG	AGTCAACAGA	420
AACTCGGCTA	TCATTGGAGG	CGTCATTGCT	GTGGTGAATT	TCACCATCCT	GTGCACCCCTG	480
GTCTTCCCTGA	TCCGTACAT	GTTCCGCCAC	AAGGGCACCT	ACCATACCAA	CGTTCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:372:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 527 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

TCGACCCCTG	GCTAAATGACA	AACTATGTA	CCTTCATGGT	GGGGGAGATT	CTGCTCTCA	60
TCCCTGACCAT	CTGCTCCCTG	GCTGCCATCT	TTTCCCTAAG	AAGCTTGTGG	120	
CCTTCCTAAC	TTGGATTGAC	CGGACCCGCT	GGGCCAGGAA	CACCTGGGCC	ATGCTCGCCA	180
TCTTCATCCT	GGTGATGGCA	AATGTCGTTG	ACATGCTCAG	CTGCTCTCAG	TACTACACGG	240
GACCCAGCAA	TGCAACGGCA	GGGATGGAAA	CGGAGGGCAG	CTGCCTGGAG	AACCCCAAGT	300
ATTACAACTA	TGTGCCGTG	CTGTCCTCA	TCGCCACCAT	CATGCTGGTG	CAGGTCAAGCC	360
ACATGGTGAA	GCTCACGCTC	ATGCTGCTG	TCGCAGGCAG	CGTGGCCACC	ATCAACCTCT	420
ATGCCCTGGCG	TCCCCGTCTT	GATGAATACG	ACCACAAGCG	TTTCGGGAG	CACGACTTAC	480
CTATGGTGGC	CTTAGAGCAG	ATGCAAGGAT	TCAACCCAGG	GCTCGAG		527

(2) INFORMATION FOR SEQ ID NO:373:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 407 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GGCAAGAAAG	GATGTCCGCA	CAGCTGGCTG	CTGCTGAGAG	CAGACAAAAG	AAGCTGGAAA	60
TGGAGAAAGCT	TCAGCTACAA	GGCCCTTGAGC	AAAGAGCACAA	GAAGCTGGCT	CCCCGCCCTG	120
AGGAAGAGCG	TGGCAAGAAC	AAGCAGGTGG	TCCTGATGCT	GGTCAAAGAG	TGCAAGCAGC	180
TCTCAGGCAA	AGTCATAGAG	GAGGCCAGA	AGCTCGAAGA	CGTAATGGCC	AAACTGGAAG	240
AGGAAAAGAA	AAAGACGAAT	GAATTAGAAG	AGGAACCTTC	CGCTGAGAAA	CGAAGAAAGCA	300
CAGAAAATGGA	AGCTCAGATG	AAAAAACAA	TCTCTGAGTT	TGACACTGAG	CGGGAACAGC	360
TTCGTGCCAA	GCTGAACCGG	GAAGAACAC	ACACCAACAA	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:374:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAATTCTGGCC	TTCATGGCCT	ACTCTGTTT	CTCCCTGGAC	TTATGTGCTT	CGTCTGGAAT	60
GTTACATCTC	TTCCCTCTCTT	TCTTTTTTTT	TGGTCCCCAT	GTTGACTGTT	TTATTGGGGT	120
TTCTGGATAT	CTCGGGGCCA	CCTCACAGGA	ACGGGTTGC	AATGAGATCA	TAAACATTGC	180
CGAAAAATCT	GTTCATTACT	GCAGGACTGT	TTCTCATCCC	CTTGACTTTC	ATCACAAGGT	240
ATCCCCCTCT	GACAATAAT	CATTTCTAG	CAACCTCAAG	CCCAGCAGCG	300	
AAGAGTCACC	CCCTATCTG	AG				322

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

GAATTCTGGCC	AAAGAGGCC	ACCTAAACCG	TCGATTGAAT	TCTAGACCTG	CCCCAAAACC	60
AACAAAGGAGA	ACAAGCTCA	TCTTCTGTT	CTTAATT	GGCTTTACTC	TTAGCCCTGC	120
CCCATTCCCT	AGGCTCTCCA	CAGTCCAGCC	GCTTGAGCT	ACTTTCCCT	CCCTGATATG	180
TGCAGCTCTC	TCACCTCTGA	GCCTCCGCAC	CTGCTGTTCC	ACAGCACTCT	CCGCATTGCC	240
TTCTCTTCACT	GTGGCTCACT	GCTGAGCTGT	GTTCAGGCC	TTGGGAAAC	CCCTCTTTTC	300
ACTCCCTTTC	CCTGGTCTGG	CTTGGGAGCC	CATGCTTAC	CCTGTCAGGA	CACCTTGAAA	360
CCCAAGCAGTG	AAAACATGAC	ACTCCTGT	CTGGCTGATT	TTCTTAGTGA	AGCGAGTAGG	420
AGTTCTTT	GTCAGGACTT	CAGCAAGCAA	AATTCAAGGAG	AGGTCAATAA	ATGTCCTGAG	480

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

GAATTCTAGA	CCTGCCTCGA	GTAACCAGAG	AGTCTTGTCA	ACATTAACAC	TAGCAGTATT	60
TCCAACACTT	TATTTTTTTA	ACTTCCTTTA	TTATACAGAA	GCAGGATCTA	TGTTTTTAC	120
TCTTTTGCG	TATTTGATGT	GTCTTTATGG	AAATCATAAA	ACTTCAGCCT	TCCTGGATT	180
TTGTGGCTTC	ATGTTTCGGC	AAACAAATAT	CATCTGGGCT	GTCTTGTG	CAGGAAATGT	240
CATTGCACAA	AAGTTAACGG	AGGCTTGGGA	AACTGAGCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCCGGCC	TTCATGGCCT	AAACAGCAAA	GAACAACCTCA	TCACCGCTCA	CGTTCA	GAT	60
CTCCTCATCG	CGGCAATGAT	CAGGGAAAGC	CGCGTTCACG	TTTACCAAAT	GTGCCATTAC		120
AGAGGAGTTT	AGATGAAATT	CATCCAACAA	GAAGGTACAG	TTCTCCAACC	AGACACCATG		180
ATGCCTCCCG	AAGTCCAGTT	GATCATAGAA	CCAGAGATGT	GGATAGTCAG	TATTTATCAG		240
AAACAAGACAG	TGAGCTTCTT	ATGCTGCCA	GAGAAAACG	AGGACGAAGT	GCAGAAATGCC		300
TACATACTAC	CAGAATGCT	CGAG					324

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GAATTCCGGCC	TTCATGGCCT	ACTGAAATTT	CAATAAAACC	ACCTTGAAAG	TTCCATTACT		60
AGAAAAGATAA	GAGTGGTCAG	AAAACATTTT	TTATTAACCT	ATTTCATCTA	GTAAGAGTAT		120
CTTAAATGTT	TTTTCTCTTG	AGTACTGAAT	ACACATGCG	GACAAATGGAC	CTAAATACAG		180
TTAACCTTTG	TTTTTCACTC	CTTGCTTTT	GCATTGTCAA	TAGTCCGGTA	AGGTTTAGGT		240
TCTATCAGAA	GTACTCAGAC	ATGCAGTGGG	CAATCGATAA	TTTCTACCTG	GGCCCTGGAT		300
GCTTGGACAA	CTGCAGGGGC	CATGGAGATT	GCTTAAGGGA	ACAGTACTCG	AG		352

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCCGGCC	TTCATGGCCT	AGTCTGTGTG	TAGTGAAAC	TCTATTGCCT	GCCCTGCACA		60
TCTGCTCCTT	TTCTTCTCTG	CACTCTGGGA	CAGCTCTAA	AGTTTGTC	ACATGTCATT		120
GACTGAGTTT	TGTATCATTT	CAGTTCTGCT	CTTTACTGGT	TCCTATGTGG	ATGCTAATTA		180
TGCAAATGCA	TTTTCCACCT	CTTGCAC	CC	TTTTCTAAG	TCACCTCACT	TCTCATT	240
TCATGTTTTT	CCNTTATCCT	CTTCTCTCGA	G				271

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

GAATTCCGGCC	TTCATGGCCT	AACGCGGCCA	GGCGATTCCG	TGAAGCGATT	CCTGCAGGCC	60
TTGGTTCCCC	TCTTGACCT	GGTACAAAGA	ATTTACGTG	AAAGATTTG	TCGTCAGAGT	120
CCACATAGTA	ACCTATTTGG	AGTGCAGTA	CAATACAAAC	ACTTAAGTGA	GCTGCTGAAA	180
AGAACTGCTC	TCCATGGAGA	GAGTAACCT	GTCTTATTA	TCGGACCCCG	AGGATCAGGA	240
AAAACATATGT	TAATAAATCA	TGCTTTGAAA	GAACTCATGG	AAATAGAAGA	AGTGAGTGAA	300
ATATGATTAC	AAGTCACCT	AAATGGACTG	CTGCAGATCA	ATGACACAAAT	CGCCCTAAAG	360
GAAGTCTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:381:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

GCAGAGTTAA	GCAAATTAAAT	TATAGCTATC	TTAACGCTAT	AAATGTGTTA	ACATGTATAT	60
ATACCATTAA	TTATGTTCTA	CTTTAGTGT	ATACCTTAAT	TTAGTGGCT	TTGGCAGGGC	120
GGGGGAGGGG	GAACGTTCAT	TAATCTCTGA	GGAAAACAAA	ACCTGTTTC	TACTTGAGTC	180
TAACATATGG	TCCCAATTAA	TTAATACCTC	TGTTAAATTT	GATGTCAGGT	CAACATTTTT	240
CAGAAATGTA	TTTATTCTCA	GAAACAGAAC	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:382:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 290 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

GAATTCCGGCC	TTCATGGCCT	AGTTGTTACT	GGAGTTAAAG	AGAGAACTGA	GAAAGACAAA	60
GGAGTAGAAC	GTAACTCAA	ATAAGTAATA	ACAGAAAAC	TTCCAAACCA	GAATATACAG	120
GTACAGGAAG	GTCAGGGTC	ACCAATCCGA	GTAACTCAG	ACAAGAAATAC	TCCAATTAC	180
AAACTCATAA	GGGTCAAAGA	CAAAGAGAGA	ATTTAGAAAA	CAGCAGGAGA	ATAGAAGCAA	240
ATAACATATA	AGATAGATCC	AAATATGTTG	GTAGCAGATT	TCTCAGCAGG		290

(2) INFORMATION FOR SEQ ID NO:383:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

CAGAGTGTGG	AGAGGGTACA	TTTCCCTTGT	ATNCTATGTT	CTTCTTTCTA	GTGGGTCTCA	60
TGTAGAGATA	GAGATATTTT	TTTGTGTTAG	AGATTCAAA	GTATATATTT	TTAGTGTAAG	120
AAATGTACCC	TCTCCACACT	CCATGATGTA	AAATAGAACCA	GGAATAAAATG	TGTCNTTGTG	180

ATAATCCCAT AGCAATTAT GGTAAGAACAA AGACCCCTTT CCCTCACCA CGAGTCTCGA
G 240
G 241

(2) INFORMATION FOR SEQ ID NO:384:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAAACAGCAAA CTTTTTAAC	60
GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTAC	120
TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTATATAACA CTTCTATAC	180
CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTCTG TCAGAGAGAA AGTTCTGCC	240
TCCCCTGCTCA AAGGTGTCCA TGCCAACTAG ACTTCCCCCTG TAGCTACCTG GGTCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:385:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 546 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAAGGA ATGGTAGGAA GGGGAGGATG	60
TAAGCGATAT CATCAAGTCATGAG GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA	120
AAGGTGAAGA TGGCTGAAGC TGTCACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG	180
AATTAGGGGT GTCTCTAGGA AGAACCGACT TAGGGTACAT TGAGAAAGAG GAGACAGGGCT	240
AGGCAGGTCT AGAATTCAAT CGCAGATCAC AGCTACAAGG ACCAGGCCCT TGATACTCTG	300
AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCG CTTGCTCAC AGACAACATC	360
TCTAGTGCCTA GCACTCAAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTGAGCAG	420
GCTCATGCG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA	480
CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG	540
CTCGAG	546

(2) INFORMATION FOR SEQ ID NO:386:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAA GAAACTGCCA AACTGTTCC	60
CAAAGTGGTT GTATTGTTT ACATTCAC GAGCAGTGTG TGAGAGCTCC AGTTCTTGCA	120
CATCCTAGCC ACAAAAAGGT TCTGTTTTT AAAGACAATT TTTTTTTCT TTGAGAGTTT	180

CGCCCTAGTC	GCCCAGGCTG	GAGTGCAGTG	GTAAGCGAAT	CCCTGCTACA	GGCCAGAGAC	240
TGTTCTCACT	TGTTTTTAC	ACCAAGTATC	GCACCTCATT	CTAACACTCC	ACCATTTAC	300
AAATGAGATT	TCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:387:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 234 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCCGCC	TTCATGGCCT	AGGTCAAGGTT	AGTCAGCTAA	TGGATAAGAG	ACTTGAAATT	60
ACTCTTTGG	GATTAGCAA	TAGAAGGGAA	AAACATGATA	AGGGCACAGA	GCGGTGGGTC	120
TGGGGAAAAA	AGCAGAGGCA	CAGTTGAAA	AAAATGTGTA	AGAGACTGAC	TAGGTAAGAT	180
ATGGTCACAG	TTCATAAGTC	CTTTGAATTC	TAGGATTAA	AAGGTGAACT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:388:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 294 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GAATTCCGCC	TTCATGGCCT	ACTAGATAAG	TGTCAATTCC	ATCTGCTTCT	GATTTCCAC	60
GTCACTGCC	TGGTCCACAC	ACTGTGATCT	TCTGCCCCA	TCTGAGTGCC	GCATACTCAG	120
CCTTGTCCCT	GCATCAGACC	CCGGCCCCAGC	ACAGTAACGA	GAATGGGCTT	CCTAAACACA	180
AAATCTGATTT	GTTCCGCCTT	CCACTTCCTA	GTGGCTTCAT	TCTCGTGCCC	TCACTCAGGG	240
CCCTCACACA	TGCTGTTCCC	TGCACCTCCG	ACACCCCTTC	CAGGGCCCCCT	CGAG	294

(2) INFORMATION FOR SEQ ID NO:389:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 215 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCCGCC	TTCATGGCCT	AAGCAAAGCT	AAGTGTAAAA	CTAAAAAGCA	GTTTGTGCA	60
ACTGGTCATA	AAAGTGATTA	AATCTAAGC	TGGCATTAAT	AAGGAAGCAA	GGTAATAAAA	120
CAAAAATATA	AACAGCTTG	AGAAAGTACA	CCTAATAACA	AAATCTTGTA	ACACAACAAA	180
TGAAAATCAC	AAAAAAATATA	AGGAGACTCC	TCGAG			215

(2) INFORMATION FOR SEQ ID NO:390:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

GAATTCCGGCC	TTCATGGCCT	AGAAAAACAC	TATAAGTCACG	CAAGTAATGA	CCCTTCTTAT	60
CCTCAACCCC	CAGCATATAT	GCACAAGGAC	AAACAGTATA	CATACAATCT	CACCTGAGAG	120
ACGTCCCTAG	ACTTGTGTG	AAACCTTATC	ATGCTGCATT	ATCTCCCTTA	CAACATCCTT	180
CTGCGCTGT	TTCTCATTT	CACACTATAC	GGAGTAAAAA	AATATACAAT	TTCTATATAT	240
TATATATATA	ACCTCCATAT	ATTTATATACT	TTTACTACTT	CAGATTAATG	300	
TTTTATATTT	TATCTATCAT	TTTAAATATG	CTATGTAAG	CATCTACAAA	ATTGGTCACC	360
ATTCCTATGG	GAAGTATCTG	CAGAACTCTA	GAAATGAATT	CATCTTTGC	TTACCCCTCC	420
CTTTTGAGG	GGACAGGGAC	TTTCTTCTT	TCCCTCATCT	TCATCTTCCC	CCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:391:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

GAATTCCGGCC	TTCATGGCCT	AGTTAGTCAG	AGTGAATAT	TCAATAATGA	GTGGTGCAGC	60
CTTGGGACTT	GAGATTGTTT	TTGTCTTTT	TCTGGCATT	TTTCTGCTTC	ATCGATATGG	120
AGACTTTAACG	AAACAGCATA	GACTTGTAT	TATTGAACA	CTGCTTGCTT	GGTATCTCTG	180
CTTTCTTATT	GTCTTCATAC	TGCCTCTGGA	TGTTAGTACG	ACAATATACA	ACCGGTGCAA	240
GCTCGAG						247

(2) INFORMATION FOR SEQ ID NO:392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

GAATTCCGGCC	AAAGAGGCCT	AGTCATCTGC	ATTTATTATG	AGCAGCAGGT	GGGACACTTC	60
CAGCAACAGT	AAAAAAAAGT	AATTTACAAA	AGCAGGTTTC	AGTGAAGCCA	TCTGGTTGTT	120
ACCCCTGGGT	GCTCACACGT	AGATGCCAAC	CCAGAGCAGC	AGGAAGAGGA	CTCCAAAGCC	180
CATGAAGAGT	GAGGCCACTA	AGGAGATGAG	GAGCTCTTA	TAGATATCAC	GAGTGTACTT	240
GGTAGAGGTG	ACCTCGTAAA	CGAAGAACCA	GGCGGTGAAG	AACATGCCAA	TGGCCAAAAG	300
CACCACGGTC	AGATGGGGGA	AGACAGCTGG	GTTCACTGGG	CTGGTATATC	TGCTCATGGC	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:393:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GAATTCCGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT	60
TTCTCGCCT TTGAGTCGGA ATGAAAGTTGT TGGTTAATT TTCCGTTGA CAATATTG	120
TGCAGTGACA TACTTTACTA TCACATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA	180
AAAAGTAGAA GCTCAAAAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:394:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT	60
AGCTCTCTGG AATTGACTC TGAGATGGT GAGATGGCTC AGAAGTTGGG AGCTGCTCTC	120
CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAAG	180
ACCACCTCAA CCAGCAAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA	240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA	300
TCCCAGTTCA CAAAGCCCCC ATCTCTTCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT	360
CCAAGTAAA CATCAGAACT TCTCGAG	387

(2) INFORMATION FOR SEQ ID NO:395:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCCGCC AAAGAGGCCT ATCGAGAAC CTTGTTTATT TAATGTGAGT TTGTGCCTTT	60
TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAAG CACTCTAATA AAATCTAGA	120
CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCCATTTCAG AGCTGTATGT ATCCTCAAAC	180
TTGCACTGAT AACCGCCATT TTACCAAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT	240
GAAAATTTTG GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAAGTTTA CTTATGCAAA	300
CATTGCACAT CTGAATTGTA ATTGGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT	360
GTCTGCCTCC TCTTCACATC TTCCCTTTA TCCACCCCTGC AGCCGGGGGG CGGGGGAGAC	420
CGGATCCCAAG GCAGGACAGT GGCTAGGCTG CGTGTCCCCA CCCCGACCC TCGTTTGACC	480
CCTGGGAGCC GGGGCGAAGA CAGCACAAAGG ACGGAGCCCT CGGATCCCTC ACGACTGGGG	540
CAGAGGCTGC GGG	553

(2) INFORMATION FOR SEQ ID NO:396:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCCGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTG	60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTTAACTA TGCTATGAAG TAGGAAAAC	120
TTATGAGGTC TTTTTAACTC AAACAGTCGA GTTTTAAGTT GAGGGTTAGC AATGATGAAT	180
GAGTGGCCAA AAAATGTATT CATATTTTA GTCTTCTTA GAATTACTGG TAGTTGTGCA	240
CAACTAGAGG GTATTTATT GTGTGTGTAT GTGTCGTGTG TGACCGAGTG CTGGAATAAC	300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTACAGT CATGAAAGCT GAGGCTTATA	360
CTTCTTGTAGG GATCGCTCTC TTCTTAATGA GTCTGTAAGT TACAAAAATA ACTTTTTCT	420
TTATTTACTA ACTGGTTGGT TTCTTAATATT AAAATATTAG GTGCTCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 548 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCCGCC AAAGAGGCCT AGATTGGGG ACATTCTCT TTAGAAGGAA AAGAGTCTAA	60
TTAGTGGATA TTAAGTAATT AAATAATACA TACTATCAA TATTATGAGA GTCACATGAA	120
CCATGAAGTC TTCACCTTAAT TTAGGAGAAA TGGGAAATAT TTCTCATCAT TCCTGATAAC	180
AGAACTAGAT ATTTCAAGAT CATACTCATG GAATGTAATC CATAATACCA AACAGGGTGC	240
TTTACCTTGA AGCCATTGAC CATTAATTGAT GATTGTTAGT AGCACAGGCT ACCAAAAAAT	300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCTC AAGTAATCAA AAGTGAGAAT	360
GAAACATACA TGACACAACG GGGGACCTCT GGGTTCTGA GACGTGGGCT ACAAGATTAT	420
ATTAGGTAGA AAACTAAAGG AAATGTATTG CAAGCAAAAG TGCAAGGGAA ATTTCACAGA	480
ACTAATTGTT TAAGGGAGGT AATAAAAGCA GCAGTTAAAA TGCAATGTCCA TGTATCAGAT	540
TCCTGGAG	548

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCCGCC AAAGAGGCCT AGGCTAAATA CGGGCACGAG ACCGATTTTC TGAAGACAGC	60
AGATTTATCA CTGTTAATCC AGCGGAAAA AACACCTCTG GAATGATAAG CGCCCTGCT	120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCGTGTGC	180
CTCATCCACT TCTCAAACTC GGAGAACTGC AAGGAGCTGC AGCTGGAGAA GCACAAGGGC	240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGCT CCATCCTGCC CACGGTGATC	300

CTGGCCAACA TGATGAATGG CGGCCGGCT GCCCGCTCGG GGAAGCTGAG CATGGGGAC	360
CAGATCATGT CCATCAATGG CACCAGCTG GTGGGGCTGC CCCTGCCAC CTGCAAAGGC	420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG	462

(2) INFORMATION FOR SEQ ID NO:399:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 428 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

GAATTCCGGCC AAAGAGGCCT AGGCCGGCA CACAGAAAAA TCGGAGGAAT AGAAATGCTT	60
GCATACTCTT GATTTTTTTT TTTTTTTTTG GTGTAaaaaaa CACACCCCTCC CCTCCCCACCC	120
CAAAACACAT CAAATTCCCTT CCTTTCCCCC AAATCCCTGG ATCTTGGAAAT GAAAGCCACC	180
CTTCCCCAAT CTGTCCCTCAC CTCCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAAA	240
TTAGTGAGAA ATTGGGGAT TTGCACACAA AAAATTAGA TAATGTTTC CAAAACCTAGG	300
TCTTCTATGC TGTGTCAAAA AAAGTTCTT ACAGACTGAG GATATTACAC CGACAGGAGC	360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTGAA GGCGGTGGCC	420
CTACAAAAA	428

(2) INFORMATION FOR SEQ ID NO:400:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

GAATTCCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACTGGT GTCTGATTGG	60
TTGTCTACT TTTCAATTTC CCTCCTTCA GATCCAACTC ATTCTACACA TTATACTGAT	120
TTTTCCTAG TGTACTGATT TCTGTTATGT CACTTGTG TGCTAGGCTTC TTAATGCTTA	180
CTGTATCAGG TGAAACACCC TTTGCTTAC CTTTCCAGGC CTTTTTAGAG TCTTATATAG	240
CTTACTCCCA TGCTCCAACT CCCCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:401:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 236 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

GAATTCCGGCC TTCATGGCCT AGGCACCTTG AAGAGATATA GAACTCCGTG TATCACATTT	60
TCCATTTTA TTTCATTTT TAATTGCCA GAGCTAAATT TCTGTGGGCC TCTGCTGATT	120
TGCACATTTG AGATTCTGT GTAAATATGC GTGTGGCATG TGACACGCC TGGGCCTCCT	180
TATCACAAAG TGTGCTCTCT CAGTGTAAATACACACAA TCCACATCGA CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:402:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCAA TAGTTTTGTG	60
CTTCAAACAA AGTTGGGTA CATTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC	120
ACCCATGTGG ACAATCTCTG GTTGTGAGGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG	180
GAACATGCCA TTGGCATGTC TTGCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT	240
GCTTATGTGG GGGATCTGG CGTGTGTGA AAAATAAA TTGCAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:403:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GAATTCGGCC TTCATGGCCT ACTTGGGTA CTGAGATACA TGGGGCGAA AAGGGGTAAT	60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAAATGA ATTTTCCATC	120
TGACTTTATT TCCAATACA CTTTCTTTT TAAAAAAACCA ATACACTTTC TTGAGGATG	180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT	240
TATTTTGTT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACAAACA	300
TGAACACACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG	345

(2) INFORMATION FOR SEQ ID NO:404:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAATTCGGCC TTCATGGCCT AAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC	60
TGCTTACAAG ATTATCTTGA AAAATGTGC TGGGGAGTAT GGTTAAATGA ATTACGGGTC	120
CAAGAATTTC GGTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTGCAAG	180
TGCTTAGTCT CTCTAAGCTT CGGTTCCCTA ATCTATGAGG AGGGCCTAAG ATATCACAC	240
CCATCACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:405:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GAATTCGGCC	TTCATGGCCT	AAGAATACGA	AATTTGAGAG	GATGAATTG	ACCTTTAATA	60
TTGTTGGACT	TTGTATTGGA	TATCTTCCT	CCATCACTTC	AAAATCGTCT	TGCTTGGCCT	120
CTTATTGCAA	CCACAGCTGC	AGTAGACAGT	TCCATACAAG	CTTCCAAGAA	CTTCATGGGT	180
ACATCTGGAG	AGCACCTCAC	CTGGGGCCAC	ATTCTCTACC	TTTCTGTCT	TACTCTTCCT	240
CCTCTGGGCT	TCTTCTGGT	GCATGGGGT	GGGGGGAGAT	ATTAAGTATT	CCCCAACAGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:406:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

GAATTCGGCC	TTCATGGCCT	ACACAGCAAC	AACCAACATA	GCTAATACAG	AAAGCAGTCA	60
GCAGACTCTA	CAGAATTCCC	AGTTTCTTT	AACAAAGTTG	AATGATCCTA	AAATGTCTGA	120
ACGGGAGCGC	CAGTCCATGG	AAAGCGAGCG	TGCAGACCGC	AGCTGTTTG	TCCAAGAGCT	180
CCTTCTGTCC	ACTTTAGTGC	GTGAAGAGAG	CTCATCCTCA	GATGAGGATG	ATCGGGGGGA	240
GGTTCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:407:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

GAATTCGGCC	TTCATGGCCT	AAAAGAAACT	AGGTGTGATT	GGAAGGAAGA	ATCATGAAAG	60
ATCAGGGTAG	ATACTGGTGG	GGCAGCTATT	AAAGGAGTTT	GACCGAGGGC	ATGACATCTT	120
CACATTGAAA	GCAATATGGG	AGTCGAATTA	AATTAGTAC	CCAGTTGAGA	AAAAAGTCCA	180
TTGCCATATT	CACAGTGAGG	TGGGACAAAA	GCAGAGTCAG	AGAGATTAAG	AGGCTGGAA	240
AGATTGAAGT	GATTTTTAGG	AATCAGAAC	CACATCAAGT	GATGACAAGT	ACAGAAGGGC	300
ACAATAGCAA	GAAGAAGAAG	AAAATGATAA	TTCTTAGATG	CCATTAGTC	CAATCAAGTA	360
CGGAAGAGAC	ATTATTGACT	GAGGTGAAAT	CAGGGCAGAG	AAGATAATAT	ACCTGATTT	420
GGAAGTGTG	CATGTAAGGG	GGCTTCGATT	TCAGCTACTT	ACATACCTGG	GAAGTCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:408:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 308 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

GAATTCCGGCT	TCATGGCCTA	CCCGGCAATT	GGCTGATCCG	CAGAAACATT	TCTGGGCTTC	60
TTTCCATAT	CTCTGGAACT	GATAGTCAA	CGTTAACCTCT	GAGCCTGAAG	GAACCAGTTT	120
GGTGGTAAAAA	AACCCAACCC	TCAGTTGTC	GTTCACAGTC	CATTTTG	TTTCACAATT	180
TGGTTCACAG	CTGTGATTCA	TGAAACGAGA	GCAATTCC	TTTGAGTGG	CATCTATTAT	240
CTCATCATTC	TTCAGGGCCA	TGAAATAGTA	ATGGATGTTT	TTGTTTCTG	CATACTCCTT	300
CACTCGAG						308

(2) INFORMATION FOR SEQ ID NO:409:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCCGCC	TTCATGGCCT	ACAATGAGGA	TAATACAAA	GAGCAATCTG	CCCCACTGTG	60
AGCCTGAGCT	TCCCATACTG	ACTTCTCTCT	CTCCAGAGGG	ATCCACTCTT	ACCAGTCTGG	120
AAAGCACTGG	GCATACAAGC	GCACAAATGC	GTGGCACATA	CTACAAATCC	TTCTAAAGCC	180
ACTGCTGTAC	ACCTGCCTCA	CTTAACCATG	CAGCTCAAG	GCTGTCTCAT	GTCATTCTT	240
CCTACAGCTG	CAGAGTTTC	AACATATGGA	CAGGTGTGCC	AGGATTATT	TGACTAGTCT	300
CTTACTGATC	TAGCTCACCT	CCTAAATACA	ACTCGAG			337

(2) INFORMATION FOR SEQ ID NO:410:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

GAATTCCGCC	TTCATGGCCT	AAAATGTGGG	GATTGGGAAC	CACTAGTTCT	TTCAGATGGT	60
ATTCTTCAGA	CTATAGAAGG	AGCTTCCAGT	TGAATTCA	AGTGGACAAA	ATGAGGAAAA	120
CAGGTGAACA	AGCTTTTCT	GTATTTACAT	ACAAAGTCAG	ATCAGTTATG	GGACAATAGT	180
ATTGAATAGA	TTTCAGCTT	ATGCTGGAGT	AACTGGCATG	TGAGCAAAC	GTGTTGCCGT	240
GGGGGTGGAG	GGGTGAGGTG	GGCGCTAACG	CTTTTTAA	GATTTTCAG	GTACCCCTCA	300
CTAAAGGCAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:411:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCCGCC	TTCATGGCCT	ACCTGAAACC	CTTACTTCGA	AGGATCATAA	GATTACAGG	60
GGTGTGGCA	TTGGACTTT	TTGCTACTGA	CATTTTGTA	AACGCCGAC	AACTGGTCAC	120
TGGGCACTTA	ACGCCACT	TCCTGACTGT	GTGCAAGCA	AACTACACCA	GTGCAGACTG	180
CCAAGCGAC	CACCACTTA	AAACAATGG	GAACATTGT	ACTGGGGACC	TGGAAGTGAT	240
AGAAAAGGCT	CGGAGATCCT	TTCCCTCCAA	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

GAATTCCGCC	TCATGGCCTA	GTGGTAGGGC	TGAATTGCA	CTATAGGGTT	AGATTTCTA	60
CTGTAGGGTT	AGATTTTTT	AATGGTGTGT	ATATAATAAT	ATAATATTAA	TAATAATCGG	120
AGAGGGTCAA	AGAGGAGGA	AACTGGGTAA	CCCAAAACAA	TAAGGTCGAG	GTCCCTGTT	180
TTCACCGGAA	AGAGGGTCAA	GGACCAAAGC	CATAGATTTG	ACTGGTAGTT	TAGTTAGTC	240
CTGTCTACGA	AGAAGAAGAG	CGGTTGTTTG	TTTTAACAGA	TTCAAGAGCA	GGAAAGCACTC	300
ATTTAGATAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

GAATTCTAGA	CCTGCCTCGA	GTCAGGCTTT	AAAAAACAT	CTCATCTGTC	CCTCTAAAAA	60
TTAGCTTCCT	TTAGAACCTC	TTCTCCTGG	CAATATATT	GTGATACTAT	TGTTATCTC	120
ACACTAAAGA	TTCAAAACTT	TAGTTTTGT	TTTAGGAAAG	TTTTTATTT	TTACATTCT	180
TTCATCCTTC	ATAATTACCC	AGTCATCATG	AACTTTGTAG	TTATCTATTT	CTTCATAGGA	240
ATCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTGATAAC TAGGGACCGA AGGAACTAA GAGACTCCAG AGACATGCGG GACTCAAGGG	60
AGATGAGAGA TTATAGCAGA GATACCAAAG AGAGCCGTGA TCCCAGAGAT TCTCGGTCCA	120
CTCGTGATGC CCATGACTAC AGGGACCGTG AAGGTGAGA TACTCATCGA AAGGAGGATA	180
CATATCCAGA AGAATCCCGG AGTTATGCC GAAAACATTG GAGAGAAGAA AGTTCTCGTA	240
CGGAAATAAG GAATGAGTCC AGAAATGAGT CTCGAAGTGA AATTAGAAAT GACCGAATGG	300
GCCGAAGTAG GGGGAGGGTT CCTGAGTTAC CTGAAAAGGG TAGGCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:415:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 529 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAATTCCGGCC TTCACTGGCGT TAAAACGTG CCTAACAGAG GTGTCCCTCG ACTTTTCTTC	60
TGCAAGCTCC ATGTTTCAC ATCTTCCCTT TGACTGTGTC CTGCTGCTGC TGCTGCTACT	120
ACTTACAAGG TCCTCAGAAG TCCAATACAG AGCGGAGGTC GCTCAGAATG CCTATCTGCC	180
CTGCTTCTAC ACCCCAGCCG CCCCAGGGAA CCTCGTGCC GTCTGCTGGG GCAAAGGAGC	240
CTGTCCCTGTG TTTGAATGTG GCAACGTGGT GCTCAGGACT GATGAAAGGG ATGTGAATTA	300
TTGGACATCC AGATACTGGC TAAATGGGAA TTTCGGAAA GGAGATGTGT CCCTGACCAT	360
AGAGAATGTG ACTCTAGCAG ACAGTGGGAT CTACTGCTGC CGGATCCAAA TCCCAGGCAT	420
ATATGAATGAT GAAAATTTA ACCTGAAGTT GGTATCAAA CCAGCCAAGG TCACCCCTGC	480
ACCGACTCTG CAGAGAGACT TCACTGAGC CTTTCCAAGG ATGCTCGAG	529

(2) INFORMATION FOR SEQ ID NO:416:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 363 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCCGGCC TTCACTGGCCT ACTGAGCCTA GTAATTCAAG GCTGCAGTGA GCTGCGATCA	60
CATCACTGCA TTCCCGCTG GGCAACAGAA GTAGACTCCA TCTCTAAAAA GAAGGAAAGA	120
AAAAAAAGAA GAAATATACA GTAATTAA ACTGGGAGAT GAAATGCTAA TTTCTAGAAG	180
TCCATTTGCT TTTGAAGGGT CTCATGTCAA AAAAAGGGAA AAGTAAGTAA ATAAGACCC	240
ATCCTACTGT TTATATACG AAAATAGTAA GTTAATTAAA TGAAAATGAA GTACATTGG	300
GCTTCATTT ACCAACCTG GAATGTTGAA AAGTGGCCA AAAGACATTT AGCAAGACTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:417:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GAATTCTGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA	60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCACCC CGGATCAACC	120
TGCTCTGAG	129

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCTGGCC TTCATGGCCT AGGAGGTGGG TATAGGAAAC ACTTGGGGAG AAATAGTGAA	60
ATCTGAATAT AGACTCTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTTGT	120
TGTTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGCTT CCTAAGTGAT GCATGCCAAG	180
GTTCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAATAAT AATAACGTGT	240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GCCAGCACAT TGTGGAACAG AAAATGGCA AAGAAAGAGT GCCCATCCTC TGGCATTCTCC	60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCTGCC TGAGATTTTG GCCTTGCAAA	120
GGGATCTAGT GAAGCAGTTC CAGAACGTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT	180
TCCTCAGCAA GCACAGTCA GATGGGTGTA GGCAGCTGCT TCACAAACAGG ATCACAGTCT	240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GGAACCAACA GAACAACCTG TGAGGAAGAA CAAAATGGCC TCTAATATCT TTGGGACACC	60
TGAAGAAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGG	120

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT	180
CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAAAATGTG GACACAGACT TGCCAGGCAG	240
CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCCCT GTGCCAGCC CGGTGGCGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:421:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAAACTGAAG GACTCTGGAA AGCAGCACCG	60
CTTTGCCTCT TTCTCTGATT ATTATTATAA GTGGCCTCG GCGGATTCCCT GTAACATGAG	120
TGGATTGATT ACCATCGTGG TACTCCTGG GATCGCCCTT GTAGTCTATA AGCTGTTCCCT	180
GAGTGACGGG CAGTATTCTC CTTCACCGTA CTCTGAGTAT CCTCCATTTC CCCACCGTTA	240
CCAGAGACAA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:422:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 216 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA	60
GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAAATG GTACTGGGGG	120
GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG	180
GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG	216

(2) INFORMATION FOR SEQ ID NO:423:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCCTG CATTCAAGAA	60
GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG	120
AAAAAGGTGGA ATTCTGGCT GGCTTCCCT CACCAAGGGG TATCCCAAAT CTATGACAAA	180
AGAAAAATGC CAGTCTCTT TGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG	240
CAAGCCTCCA TCTTCCCCGG GGAAATTGAA AACCAAGATG GGGCTCTGTC AATGACCCCTC	300
TAGCATTAT TGAGTGCCTA TTAGACAGGT GGCCTGGGC TTGAAATGC AATATCTTAT	360
TTAACTTAAT TCTGAGAACG TATCTCGAG	389

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 411 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

GGCCGTGCTG	ATGTCTTGA	AAGAAGGCTA	TAAGAAGTCC	TCAAAAATGG	TATTTAAGGC	60
TCCCATAAA	GAAAAGAAGA	GTGTTGTGGT	CAACGGAATA	GATTTATTAG	AAAATGTCCC	120
ACCCAGGACA	GAGAAATGAGC	TCTTCGAAT	GTTCTTCGG	CAGCAGGATG	AGATTGACG	180
GTTGAAAGAG	GAGCTGGCCC	AGAAGGACAT	CCGCATTGG	CAGCTCCAGC	TGGAACTGAA	240
AAACTTGCGC	AACACCCCCA	AGAACTGTTA	GCTCCCAGC	TGGCTGTGTT	TCTAAGCCGA	300
TCTCTCCGTC	GTTTCTACTC	ATCCCTTAAC	TTCTCCCTTA	CCAGTGACCC	CAGAGACAGA	360
GCCAGGACAG	GAGTGGGGC	CAGCCTGAGG	ACCCCCGCT	ACCACCTCGA	G	411

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 691 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

GGTACCAACA	GGACACCCCG	GTGGCCCCCG	GCTTGACGT	CAATGCCCG	GACCTCTACA	60
TTCCAGCAAT	GGCTTTCATC	ACCTACGTTT	TGGTGGCTGG	TCTTGCCTG	GGGACCCAGG	120
ATAGGTTCTC	CCCAGACCTC	CTGGGGCTGC	AAGCGAGCTC	AGCCCTGGCC	TGGCTGACCC	180
TGGAGGTGCT	GGCCATCCCTG	CTCAGCCTCT	ATCTGGTCAC	TGTCAACACC	GACCTCACCA	240
CCATCGACCT	GGTGGCCTTC	TTGGGCTACA	AATATGTCGG	GATGATTGGC	GGGGTCCCTCA	300
TGGGGCCTGCT	CTTCGGGAAG	ATTCGGCTACT	ACCTGGTGTCT	GGGCTGGTGC	TGCCTGGCCA	360
TCTTTGTGTT	CATGATCCGG	ACGCTGGCCG	TGAAGATCTT	GGCAGACGCA	GCAGCTGAGG	420
GGGGTCCCGGT	GCGTGGGGCC	CGGAACCGAGC	TGCGCATGTA	CCTGACCATG	GGGGTGGCGG	480
CGGCGCAGCC	TATGCTCATG	TACTGGCTCA	CCTTCCACCT	GGTCCGGTGA	CGCGGCCCGC	540
TGAACCTCCC	GCTGCTGCTG	CTGCTGCTGG	GGGCCACTGT	GGCCGCCGAA	CTNATCTCCT	600
GCCCTGCAGGC	CCCAAGGTCC	ACCCGTCTG	GCCACAGGCA	CCGCCTCCAT	CCCATGTC	660
GCCCCAGCCCC	GCCCCCAACC	CAAGGCTCGA	G			691

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

GCAGACCATA	TATCGAAAGT	TCTTTACTTG	TATCAAGGTG	AGAAAAAATT	AGAAGAGATA	60
TTACCTCTGG	GACCAAACAA	AGCTTTTTT	TATAAAGGAA	TGGCATCATA	TCTTTTACCA	120

GGACAAAAAT CTCCATGGTT TTTCCAAAAA CCCAAAGGTG TAATAACTT GGACAAACAA	180
GTAATATCCA CGAGTCAGA CGCGAATCC AGGGAAAGAG TTCCCATGTG TTCAGATGCT	240
GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCCTGAAT CCAGGCGAGA AGTTCCCGTG	300
TATACAGATT CTGAACCTCGA G	321

(2) INFORMATION FOR SEQ ID NO:427:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 190 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTAT	60
ATTAAAAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGCTCTATGTG GAATATTCT	120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCAGA GGTTACTACT GGGTGGCAGG	180
TGGGCTCGAG	190

(2) INFORMATION FOR SEQ ID NO:428:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 670 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG	60
CTGCCAGCA GGTGCTCGA TTCCCTGCCCT TTGTGACCTC CCAGGAAACA GAACTGATCT	120
GGGACACTAT GTCACTCTC CTCTCATCTC GGGTCAGTC GGGTTGGGG GCTGCAGCAG	180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCAGTGTGGA GCCAGCCTCC	240
CTATGGGAGG CAGAGCGGCAGGACAGGGCTTGGAAATCA GCAGGTCGG CTCCCTGGGCT	300
GTGGCCCTGG AGAACACACTG CCCCCAGGAT GACACAGGGAGAGCCAGGTCAGGCTGG	360
GCCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGCA GGTCACCCAGGAGCCCAAG	420
AGGGCCGTGG GGCTGAGGA GGTCTAAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC	480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGC	540
CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCCCTC AGGGAGCAGA GCAGAGCAGG	600
TGGTGGACGG GCCCCAGTGCCTGGTGTGTTTC ACCACCATCC CCCCCATCCCC CATCTAAAGTC	660
GCTCCTCGAG	670

(2) INFORMATION FOR SEQ ID NO:429:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

CTAAGGATTG GCGATTCCTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCTGTGTTT	60
ATGGCTGGCC TGGTTTGTC CTGGAGTCGG CACGGTGGCT GATAGTGAAG CGGCAGATTG	120
AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCGAAA CCGGCCCAT GGGCAGATGC	180
TGGGGGAGGA GGCCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCCTGCAA	240
CATCCCTCCTT TTCCCTTGCT TCCCTCCCCA ACCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:430:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTCATC TTTAAATGCT	60
GTTTTCTCTG TTCAAAATGC CCTTTCTAC CTTATCTACT TGTGCCACTG CATATTCCATA	120
AGGGCTCAACT CAGGGTATCT TCCCTCGAA ACCTTGTCTG ATCATCCTGG CCCCTCTGGC	180
GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA	240
GCCCCGCTGAA TTGGCATTAT GGGCACGTGC GTCTCCCTCA TTCCATGGAG CTCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:431:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GTTACATGAC ACTGTTAACATG ATTGCATTTG GCTTGGCTGTG GGGGCATCTC TTGGGGATCA	60
AACCCACGCA GAGCGTCTTC ATTTCCACGT GTCTGCTCTT GTCAAGCACA CCCCTCGTGT	120
CCAGGTTCTCT CATGGGCACT GCTCGGGGTG ACAAAAGAAGG CGACATTGAC TACAGCACCG	180
TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCACTCGG GCTCTTCATG GCGGTATGC	240
CGACTCTCAT ACAGGGGGC GCCAGTGCAT CTCTAGCAT TGTCGTGAA GTTCTCCGAA	300
TCCTGGTTTT GATTGGTCAG ATTCTTTTT CACTAGCGGC GGCTCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:432:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

GAATTCCGGCC TTCATGGCCT ACCAGGTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG	60
GGATTATACT CTGCACGCTG CCATCCACCT TCTCGAAGAG GTTTATTCCC TGCAGAGACT	120
CAAGGGCCGC ATCAGCCAGT CAACCAAAAC CTTCACCCCT TGTGAACGGC TGGAGAAGAG	180
CGGGACGAGC TTCCTAGAGG GGACCTGAG CGGGACGCTTC CGGACAGGAT CGGTGGTCCG	240

GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCCGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT	60
TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCACTGTCC ATGTCACCCT CCTCCTCCTC	120
CTTGGAAATC CTCTCCGCAC ACTGTGGCCC TTGTCTCAGG GCCCACAAAGC TGAACTGTGG	180
CATAGCTCTC TCTTCTCTC CAAGAACACT CAGCAGCCTA CATTCCCATT CCTGGTATGT	240
GCCATTGGGT TGGAATGTCCC CACTTATCTC GAG	273

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GGCGGGACAG TGCTTGAA ACTGAACACA ACAAAAGTAT GGATATGGGA	60
AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA	120
CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG	180
ATTCTAACAA AACAGCTTTT TGAAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT	240
CAGCAAGCTA GGAAGCAGGGC AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG	300
AATGCAAACCT ACCCACACCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCCGCC TTCATGGCCT AAATGATCAA ATTTGGCTT ACATATTTG CAACAGTGGT	60
ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTGA	120
CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CGGGGGTCC TACACATCCT TCCCGATGGA	180
AGAAGGGGTT GGCCAAAAAG GTCAGCCAGC TGATGGGTG GACCAAGAAA GACAGAGTGA	240
TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCAACAAAA AACTATTCTG	300
TTATTGTGAT GCTTACTGCT GCTCTCCACG CGTTCAAGTTC ATGTTGTCATG TGCAAAGGTG	360
CTGCTGAAGA ATTTCAGATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCAACACAA	420

AGGTATTTTGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTGAA GCGCTCCAGG	480
TAACGTCAGT TCCGAGTTTC TTCCACTTT CTGCCAATG GAAATTACA ACAGATGACA	540
GTCTCGAG	548

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCCGCC TTTCATGGCT AAAATGAAAT TCAGACAAAAA TCACTGGCAC CAAAAATGGT	60
TTATTCTGAG CTGTCCTTCAC TTTGACTATT TGGGGGCCTT CTCTCAAGTA CAGATGTGGG	120
TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT	180
GTGTGTGTGT GCCTCTGGA GAGTGAAGAA TGGACTCAA AAGTAACATC AAAATCTAA	240
CTGCCACCAT CCTGGAGACA TTTTCAGGG CTTTCCTTCA AAGTCTTCA AGTACAGGAC	300
ATCTCGAG	308

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCCCTCG GCCCCCCACGC CATATGACCA AAGTCACACC AGGTTCAAGAG	60
CTGCCCCTCTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT	120
GATGTGCCCCA CTCCCCTCTC CTCTGCAAGT TCAGAACTG CCTCAGCAGT GGTCACTCCC	180
TCTACAGACA GTGGCCTGGA ATTTCCTCC CAAACCACTT CCAAGGAAGA CCTTACTGAT	240
CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA	300
GGTGTTCCTCG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCAGTCAGCA	360
TCTGTGGAGT CCATCCCTGA AGTGTAGAG GAGTGCACGT CCCCTGCCGA CCAACTCGAG	420

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCCGCC TTTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC	60
AACGTGCTGG ACCACTTCTC GGAGCTGGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG	120
CTGGCGTGTGG TGAAAGAGCC GTACACGGTG CCTGAGGCC GCATCCACGT CGGCCATGTC	180
CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCCTCA ACGGGGTTGA CTGCAACTCC	240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

(2) INFORMATION FOR SEQ ID NO:439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

GAATTCCGCC TTCATGGCCT AATTGAATT TAGACCTGCA CCCAGCCTTC TTCTTTCAT	60
TATAACCTTT ATACCACAGT AAGCTGTGC ATCATTCAA TGACTCTGCA TCCTATATTG	120
AATATTCTCC ATTATTCTCT AATATCTTG GGGTACCCA GGATTACAGG GTTCTGGCA	180
TACATGTTAA TGCTTTGCC AGGACTTTTC TTTTTATTC TTGTCCTGAC CCATGTCCTT	240
TGCTTATATT TAAAGTTTT GCTCTTGATA TCATTGGTC TTTCCTAAGT CACTTTTCT	300
GGTAACTGCT TTGGAATGAA TCATACATAT CTCACTACAG GAGCTCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

GAATTCCGCC TTCATGGCCT ACCAATACTC ATAATTAAAA GTTTTCGTT GTCAAAACAT	60
TTTCACAGTT CAGGAATCAC AGTCCTATT CATCTTTGA AATAAAAGTT AAAGTCCATT	120
TTTCTTAAGC CTTATTATAC CATTATCAA AAACACTACC TAGCATTCCAT CTTAGTTTT	180
CATATCTCT TAGCAGATAG TTTAGTATAT TCCATTTGTC TTATTGAGG TTTAAAAAAA	240
GTTGTTGAAAG AAGTTTCTCA GGAGTTTCAGC AAGCCTTCC ATCTATCTTC TATTAAAAA	300
GAATGTGATT TATTGTTTT TATGATAAAA TATACTCTGT GTGTTCTCA TATGATGTT	360
CATTACATTA ATCATCCATT AAGTAAATGT TTTGTGCTG CAAAACCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCCGCC TTCATGCCTA GCCAGGAGGA GGAGGACCT ATGAACAAAC TCAAGGGCCA	60
GAAGATCGTG TCTGCGGCA TCTGCAAGGG CGACCACTGG ACCACCCGCT GCCCTACAA	120
GGATACGCTG GGGCCCCATGC AGAAGGAGCT GGCGGAGCAG CTGGGCTGT CTACTGGCGA	180
GAAGGAGAAG CTGCCGGGAG AGCTAGAGCC GGTGCAGGCC ACGCAGAACAGACAGGGAA	240
GTATGTGCCG CCGAGCCTGC GCGACGGGCC CAGCCGCCGC GGGGAACCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 222 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

GAATTCCGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCCTGGT	60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCCT GCCCCCGACA GCCAGGCCTG	120
GGTTTGTCTT TTTAGGTAGA GTGCCTGGTC CAGGTCAATTG GAGGAGAGTC CACATGGCCA	180
CCTCTGGCGT GTTCTAGAGA GGCCCTCCCC TCTAGGCTCG AG	222

(2) INFORMATION FOR SEQ ID NO:443:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

CTTTATGACA GCCATGAGCT TTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT	60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGA GGTATTGGA TTTTTGTGAT	120
TTGACCAGT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAAA ATAATACCAA	180
GTCGTTTGAG CCCCACTAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

GAATTCCGCC TTCATGGCCT ACCTGCCTCC CTCCCTGCTT CTTGCTCTGC TAACTCAACT	60
CTGCCCTTCCT CTTTTTCATT CTTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG	120
GGTGCTAACCTT ATTTGGTGC CTGCCCCAGC CTACCCCAAG TGCAAGCAGA CTCTCGAG	178

(2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

GAATTCTGGCC	TTCATGGCCT	AGAAAGCCAC	AAACTTTTA	GTTTTAACT	TCAAAGGCTT	60
CTTCTCTTTT	AAAAAAAATT	ATTTTAATAA	TAGACTCAA	AAATTGGATG	TATTATTTG	120
AGCTTCTAAT	TGCTGCCACT	TGGAGATGTC	CAAGTAAGAA	GGCCTCTTT	TTACATGGGA	180
TGAATTGTGC	ACTTCTACTG	ATGATGACTA	CAGCAGAAGT	GATGTTATAC	GTACAGGCAC	240
TTGAACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

GAATTCTGGCC	TTCATGGCCT	AGGGCTTATA	TTTTAACTGA	ACTATTATTA	AATAAAAACA	60
AAATAAAATC	TTATCATATA	GCTGTAATCT	GTTCTAAGGA	AAAAATCCTT	CTATCAAGAC	120
TAAACCTCTA	ACTGAATACA	GAATGACATT	TCATGCCCTA	AGGTCTCTGT	CCATGTTGTT	180
CCTCTTTCT	ACTGCTCTT	ACTGTATTAG	TTCAAAACAT	TCTCAACAC	TCTCCAAAC	240
CCAATTCAA	CATCACCATC	AGAAAGCTT	CCATGATGGG	CCAGGTGTTG	CGGCCCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

GAATTCTGGCC	TTCATGGCCT	AGCTGAAATG	CTTTCTATTG	GATACTATCT	GGGCATATTA	60
CTTCTGTGG	TTCACTGTCT	GGGTGACAGG	ATTCA TAGAA	CCCCAAACTT	TAGCACCACG	120
CAGCATAACC	TTGTAACAAA	GCCACTCGAG				150

(2) INFORMATION FOR SEQ ID NO:448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

GAATTCTGGCC	TTCATGGCCT	AATTGATTT	TATTAGTTT	AAATTGTATT	TCTTCAAATT	60
TCATAAACTA	TAGCATTTAT	CTCCATATT	TTAATAATG	ATCACAAATA	AATCACTGTT	120
AATATCTCCA	TTTACACTTT	TACAACCTCT	GCTATTGCTG	GATTTTCAT	CCTATGATAT	180

GTTAAACCAA TTTAAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAAATTCGGCC	TTCATGGCCT	AAGACTGGGG	GCATGTACCC	CACCTACTTT	CTGCACCTGG	60
ACCGTGAGGA	TGGGAGAAAG	GTAAGGTTGG	TCTGGGCATG	TTATCATCTA	GGCTTACAG	120
CCCTTGAAA	TCCTAGGGGC	TGAAATGTGA	CTGGAAGTCT	CATATCTACC	GCTGACCTCT	180
CAGTTCCCTCA	AAGAACCTGC	CTTCGTGCTCT	GGTCTGTGCA	CATCTTGTCG	TTTTCCAGTG	240
CATTGTGTTG	TGTGCACATA	TGTGCGTTG	GGAGCTGACG	CAACGGAGAG	AGTCTGTGTC	300
AGTGGCTCTC	ATGACTGTGT	GCAGACCCAGA	GGCTGAGCTT	GGAAATATGAC	CTCATTCCAC	360
TCCCCAAGGT	GTTCCTCCCTG	GGGGGAAGGA	AGAGAAAGAA	GACTAAAAGT	TCCAATTACG	420
TCATCTCTGT	GGACCCCACA	GACTGTCTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTCGGCC	TTCATGGCCT	AAAAGCAAAT	TAACTTGTT	TGAAAAGAAA	GTATAGATTA	60
ATTTTGTGTTT	CTGTTTAAAT	TTTATCTCT	TGGTAAAGAT	TTTTTTTCC	TGGGCAGAAA	120
ACTTGGCATT	TTTAGGCGTA	GATACTTAC	CTTACAATGCA	CAAATGAAT	TTAATTCCAG	180
TACTCAGGTT	TTTCCCTTTA	ACAGACTCTA	TGTGTACCG	GCATTGAATT	CTAGACCTGC	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC	TTCATGGCCT	AGTTTGGTGG	GGTTGAAGTT	GATGGCAAAC	TCATGGGAGA	60
CCCTCCAGTC	TGGGGGTAAC	TGGGCCCGA	ATCCCAGAGC	TGGAACATC	TTATCACTGT	120
CGTAGTCCTG	AATGATCTGC	CCAACAGCCC	AGATGGCCGA	CAGATATTG	TTGGTGCCCA	180
TAGGGTTGAT	ATAGTGCAA	GAGGAAGGGT	CGAGGGGATT	CCCGTGGAG	GCTGTAAAGT	240
CTATTCAC	GGTGAACATG	AGCTGGCAGC	CTCCCAAGGAT	GTACTCAAGG	AAGGACTAGT	300
CTCGGTTTAT	CTTGCAGGAT	CGCAGGATGA	TGATGCCGA	GTTTTATAG	TTCTTCTTCT	360

TCCCTCTGCTT CTTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCTGGCC	TTCATGGCCT	ACACACTGAC	TGACAGACCA	CGGTATGCCT	TGCACCACCC	60
TGGCTGCTGG	GGTCCAAAGA	GGGATCTGGT	AGACCTGGC	TGAAATCTCA	GCTTCACCAT	120
TTACCATCTG	GGTGGCCAAT	GGAGTGTAC	TTGGCCTCTC	TGAGCCTCGG	TTTGCTCGT	180
CCTCTGAAACA	GTAAGATACC	TCCCCTTGGC	TGTTGTGATG	AGGATGAAGG	TTAGCCTATG	240
CCCAGTAGTA	TGCCCTGTC	TTCATCGATG	CCTGCTCATC	TCACTCTTG	TCTGAAACAA	300
CCCCTAGTAG	AGGCGCAGAG	GGGCAAGGGCC	CACCCCAACC	ACCAAAACGT	GGTGCAGAAAT	360
GAGGTGATCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GGTCCCGTCC	GCCGCCACCA	CCCACCTCCGG	ACACAGAACCA	TCCAGTCATG	GATAAAAATG	60
AGCTGGTTCA	GAAGGCCAAA	CTGGCCGAGC	AGGCTGAGCG	ATATGATGAC	ATGGCAGCCT	120
GCATGAAGTC	TGTAACTGAG	CAAGGAGCTG	AATTATCCAA	TGAGGAGAGG	AATCTTCTCT	180
CAGTTGCTTA	AAAAATGTT	GTAGGAGCCC	GTAGGTCATC	TTGGAGGGTC	GTCTCAAGTA	240
TTGAACACAAA	GACCGAAGGT	GCTGAGAAAA	AACAGCAGAT	GGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCTGGCC	TTCATGGCCT	AAGAAAGTGT	TCCCTGTATCC	ACCTCTTCCT	GGCCTCCCTT	60
CCCCCACTTC	CTGGTCCCTG	TCCACTCCCTC	AGGTTGGTGC	TCTCACTTCT	TGAAAGCTCT	120
AGGCACCCCC	GCCTCCCGCC	AGGCTCCCCG	TTGGCTCTG	GCAGGCCAGC	TGAGAAATGAA	180
CAGGAGATGG	AGGCAGGCGAG	CCCAGGCTGC	AGAGGTGAGG	GATGTGGGGC	CAGGCCAGA	240
GGGCTCAGCC	TAGAGGCTTC	CAATCTCAGA	TTCTCTTGCC	TGTGGTCATC	TGTTTGTCCA	300
TCAACCCCAAGG	ACAGGGCAGA	CAGAGGGCA	AAGCAGTGGG	GGCCCCAGAG	CCTAGCTTCC	360
CCTCAGCCTG	GGGGAAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

AGAGCACGTC AATGCCATGA	GGGGCCTGCA AAGCAGCAAG	GAGCTCAAGG CTGAGCTGGA	60
CGGGGAGAAC	GGCCGGGACT CAGGGGAGGA	GGCCCATGAC TATGAGGTGG	120
TTTAGAGATC	CTTGAATGCA AATACAGGGT	GGCAGTAAC GAGGTGATTG	180
TGAAATTAAG	GCCTTAAAGG AGAAATATAA	ATAATCTGTA GAAAATACACA	240
GGCCAAGTAT	GAGAGTAAAAA TCCAGATGTA	CTGATGAGAA TGAGAAGAC	300
CACCAAGGAG	AGTGGTGAGA AGATGGCCA	CATGGAGAAG GAGTTGCAAAG	360
CATAGCCAAC	AAAATCACA GTACCCTTAA	TACGGCCAG AATCTCGAG	409

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

GAATTCCGGCC TTCAATGGCCT	AAATTTCATG AAAAACAAAT GGCTTAAACC CAGGGAAAGCA	60
AGGATTATAA TTGATTTTT	TGAGCAATGT CTCTTTGGT TACAAAGTAA AAGGTTAAAT	120
AAAAGTTAA AACGATTTGG	AAAGAATGTT CTTGGTTTT TTCACCTCAGT AACCTAAAGT	180
TTAATGACCC TTACAGTGC	TGATAAACAC TTAAATTTT GCAGTAGGCA TTGCTAGTTTC	240
AAATTGAAGG AAGGTTGCCA	GGCTCATGCC TATAGTCCC ACTACTTAGG AGGCTAAGGC	300
AGGGGACGC CCTCGAG		317

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

GAATTCCGGCT TCATGGCCTA	CTGCTCTTG GCTAAGGTGG CAGTGTACCT CTAGATCAAC	60
CTGGGCAACA GTCACAAGGG	AGTGTGACTT CTTGGCCATA ATAAACTCAG TTGATAGTGT	120
TTATGTTATT AATCTGAATG	CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC	180
CCCAAACAC	TAAAAACTAC CTAACACACTG ACTTAGTAA TAGTAAAAAG GTATGTTGG	240
GACTTTAAA CCTTGAATCC	ATTAGCCAGG CTTGGGTGA AAGGACATC TAAATCATG	300
CTAGTCTAAA CCATGCTCTT	CCACACAGCT GTTTAAAAC CACTGGGTAT GAGGAATATG	360
CTAGAAAGAA ATGTTAAAAA	TAGATTGTTG GCTCACACTT ATTGTTCTAA TAAATAGGAC	420
CATTATTACT ACCAGGAAAG	TCTTATTAT TTTGCCTGAA ATTGGCTTAA AGAAAGTCTC	480

ATGACGGGAT GGGATGGGCC GGCACTCGAG

510

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCTGGCC	TTCATGGCCT	AGCGGAAACA	ACTGAAA	ACTA	ATGGAAGATA	TGGATACAGT	60
AATTAACCC	CGTCCTCAAG	TAGTAAAACA	AAAAAAACAG	CGACCAA	AAAT	CTATTCACAG	120
AGATCATATT	GAATCCCCA	AAACACCA	AAAGGGTCT	CCAGTCTCTA	GCCTT	CTTT	180
GGCATCGCTG	AACACGGGTG	ATAACGAGAG	TGTACATTC	GGCAAGAGGA	CGCC	AAAGATC	240
AGAGTCTGTG	GAAGGGCTTCT	TATCTCCAAG	TCGTTGTC	AGTCGAAATG	GAGAAA	AGA	300
CTGGGAGAAT	GCATCAACAA	CTTCTTCAGT	GGCTTCTGGA	ACAGAA	TATA	CAGGACCAA	360
GCTCTACAAA	GAACACCTCG	AG					382

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCTGGCC	TTCATGGCCT	ACTGAGTC	CCC	AGGCCGGG	CCTGCC	CCAGGG	CTGG	60
GACTCTGCAG	TTGGGAGCTT	GTCCAGCTG	CCC	CTAAT	GCTTTCTC	TCC	AGGGAC	120
AGGGACCTC	CGGAAGCAC	GTAGTCCC	TGTG	TACCT	TAGGCTG	TCTG	TCCC	180
GGGGTGACGT	AATGCTG	CTGCTTG	AA	TCTCTCATG	TTAACAGG	AGCCCAG	TGT	240
TTTCACAAA	AGCAGAAATTG	GATTTTTTT	TTAAGTC	GAT	AAATTTTAC	TCAAGGA	ATT	300
CCATGTTGTG	ATTTCTCCA	CTGTCATCA	AGGT	ACTTT	AGATC	CTCTA	AAGAGCT	360
GTCAAAAGAT	TTATCTCAA	GTTAGTC	CTT	TAATGAAA	CCGATG	CTTA	TTTAATCCA	420
GTCAGCCCTC	GAG							433

(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GTCCGGCTAA	AGTAATCCAG	TCACCTG	CTG	TACTAG	AAGGG	TGAG	ATGTC	CACAAA	60
CAAATTTAC	CCCTGACACT	CTT	GCC	CAGA	ATGAA	AGGGAA	GGCTATG	TATCAGTGT	120
GCCTTTGTAA	GTTTCTATCA	TCATC	CTT	CCGTG	TAA	AGATCA	TATT	ACATG	180
GTCAGCAAAA	TGAAGTGATA	CTGATG	TG	CAGAGT	GCCA	TATT	ACATCT	AGAAGCC	240

AGGAACCTGAGCCACGTG GTGAATGACC ATGACAATGA TCCAATATC CACACCGAAC
TCGAG 300
305

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 563 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCCGCC	TTCATGGCCT	AAGAAATATC	AGTCCAAGCA	AGAGGAATTA	CAGAAAGATA	60
TGCAAGGAAG	TGCACGGCA	TTGGCTGAAG	TAGTGAAGAA	CACAGAGAAC	TTCTTAAAG	120
AGAATCGTGA	AAAGCTGTCA	CAGGAAGAGA	AGGCTTGAT	TGAACAGAAA	CTTAATGAAG	180
CTAAGATAAA	GTGTGAACAG	CTTAATTAA	AAGCAGAACAA	GTCTAAAAAG	GAGCTGGATA	240
AAGTTGTGAC	AACAGCAATC	AAGGAAGAAA	CTGAAAGGT	AGCAGCAGTG	AACGAGCTGG	300
AAGAGAGCAA	AACCAAAATA	AAAAACCTT	TGGACTGGTT	GTCAAATGTT	GACAAAGACT	360
CAGAAAGGC	AGGGACAAAA	CACAAACAGG	TAATCGAACAA	GAACGGGACC	CATTTCAG	420
AAGGTGATGG	CAAGTCAGCA	ATTGGAGAAG	AGGATGAAGT	TAATGGTAAC	CTGTTGGAGA	480
CTGATGTTGA	TGGCAAGTT	GGAACCAACTC	AGGAGAACATC	GAATCAGCAA	TATCAGAAAG	540
TTAAGGCCCA	ACATGGACTC	GAG				563

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 477 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA	AGATGGCGGC	GGCTGCGTGG	CTTCAGGTGT	TGCCCTGTCA	TCTTCTGCTT	60
CTGGGAGCTC	ACCCGTCA	ACTGTC	TTT	TTCAGTCGG	GACCGGCAAC	120
GCCGACCGGT	CCAAATGGCA	CATTCCGATA	CCGTCGGCA	AAAATTTT	TAGTTTGGA	180
AAGATCCTCT	TCAGAAATAC	CACTATCTTC	CTGAAGTTG	ATGGAGAAC	TTGTGACCTG	240
TCTTTGAATA	TAACCTGGTA	TCTGAAAGC	GCTGATTGTT	ACAATGAAT	CTATAACTTC	300
AAGGCAGAAG	AAGTAGAGTT	GTATTGGAA	AAACTTAAGG	AAAAAAGAGG	CTTGTCTGGG	360
AAATATCAA	CATCATCAA	ATTGTTCCAG	AACTGCAGTG	AACTCTTAA	AACACAGACC	420
TTTCTGGAG	ATTTATGCA	TCGACTGCCT	CTTTAGGAG	AAAAACAGGA	GCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GTTGCACTCC	TGTTGTACTC	TTTTAGAGGT	GGAAAAGAGG	TGGATACTGA	GATCTAAGAG	60
GAAAGGATAG	TCATTACAGT	TCTGAGATAT	GCGCTCTCTC	TATTGTTCTC	GAACACAAAG	120
GGATAGTCTC	TTTTCTGGAG	CTGATGTCCC	TGCTTGAGG	TTAGCCCCAA	AACATGGCTC	180
TTGTATTGTT	CTAACAGAAA	AGGCTTTCAT	TTGGTTCTT	CTGATGGTG	TTACCTACTG	240
CCTAATATGT	GTTCATTTT	TGACAGAGAG	GCAGACTATT	GAAAAGTCT	GTGTGAACAG	300
AGAGCAGTTC	ATTAAGCCA	TTGCTTCAG	TAATGTGCC	TTGACCCCTT	CTGCTTCCCC	360
CTTCTCCCAT	GACGAGCTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

GGACCTGCCT	CAAGGACATG	GGTGGACATA	TGGGCGGACT	CTCAGGGACA	ACCAAAGTGA	60
TGATCACACT	GACCGATGTC	AATGACAAACC	CACCAAAGTT	TCCGAGAGC	GTATACCAGA	120
TGCTCTGTGTC	AGAACGAGC	GTCCCTGGGG	AGGAAGTAGG	AAGACTGAAA	GCTAAAGATC	180
CAGACATTGG	AGAAAATGGC	TTAGTCACAT	ACAATATGT	TGATGGAGAT	GGTATGGAAT	240
CATTTGAAAT	CACAACGGAC	TCTAAAACAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 488 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

GTTCTAGACC	TACCCCGAAC	AGCCCCAAAC	AGTCAGAGTG	GCACAAAATG	ACAGTCTCCA	60
AAAACGCCC	CGACCAAGAT	CTCAAAATCA	AACTTGTGT	CCGAATGGAT	AAGCCTAA	120
ACATGAAGCA	TTCTGGCTAT	TTATGGGCA	TCGGTAAGAA	TGTCCTGGAAG	AGATGGAAGA	180
AAAGGTTTTT	TGTATTGGTG	CAGGTCACTC	AGTACACGTT	TGCCATGTGC	AGTTATCGGG	240
AGAAGAAAGC	GGAGCCTCAG	GAACCTCTAC	AATTGGATGG	GTACACTGTG	GATTACACCG	300
ACCCCCAGCC	AGGTTTGGAG	GGTGGCCAG	CCTTCTCAA	TGCTGTCAAAG	GAGGGAGACA	360
CCGTGATATT	TGCCAGTGCAC	GATGAACAAG	ACCGCATCCT	GTGGGTCCAG	GCCATGTATC	420
GGGCCCCAGGG	GCAGTCACAC	AAGCCTGTGC	CCCCGACCCA	AGTCAGAAA	CTCAACGCCA	480
CCCTCGAG						488

(2) INFORMATION FOR SEQ ID NO:466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

GAATTCCGCC	TTCATGGCCT	AGCCGCTGCG	GTGAGCCTTG	AAGCCTAGGG	CGCGGGCCG	60
GGTGGAGCCG	CCGCAGGTGC	AGATCTTGGT	GGTAGTAGCA	AATATTCAAA	CGAGAACTTT	120
GAAGGCCGTC	TGAGCTAAAA	AATAATGCTG	ATTTGGCTC	ATCATATTAA	TGAAGGAGGG	180
AGAAATAGAA	GCATGTATAA	TGTAGAAAAA	CATATCTTAT	CCTTATGTTT	GCATATATTG	240
TTGAATAAAT	ATAGTTAAC	GAATATGTTT	TCTCACCTTT	CTTTGCTTGC	ACTTCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

GTTCTAGACC	TGCCTCGAGA	TATGCCGAA	GGTTGCATGG	CTGGTCCCAG	GGCCAGCACA	60
GGCCCGAGGC	CGGGCTGCCT	GGTTTATTAA	TTATTTAAC	TTATTTCTG	TTTTATGAGT	120
GTGTGTCCG	CCACCCCCAC	CCCTTCAGT	GTAAAGTGGG	GAGCCCTGGG	GGAGTCTCTC	180
CTGCCCTCCA	GCCTCTCCCA	AGACCTCCCC	CCTCGTACC	AGCCATCCCT	CTGGACCAGG	240
CAGAGGGCGG	ACCGGGTGGG	CAGGGCCTG	AGGGTGGCTC	GGGCCAGCCC	ACCAGCCAAT	300
GGACCCCTCC	TCAGGCCGCG	AGTGTGCC	TGCCCCTTTT	AAAAACAAAA	TGCCCTCGTT	360
TGTAAACCC	TAACGCTGA	G				381

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

GCTGTCCAAT	TATACTGACC	TGGCCATGAG	CACGGTGAAG	CAGACCCAAG	CCATTCCATA	60
TACTGGTCCC	TTTAAATTG	TCTGTTACCA	GCTGCAGAAA	TTGACAGGTG	ATGTGGAAGA	120
ATTAGAAATT	CAAGAAAAAC	CTGCTCTGAA	AGTGTCAA	AATATTACTG	TAATACAAGA	180
ACCAGGGCATG	GTGGTATTAG	AATGGCTGGC	AAACCCCTCT	AATGATATGT	ATGCAGATAC	240
AGTAACAACT	GTGATATTGG	AGTTCAGTC	AAATCCAAA	ATAAGAAAAG	GCGCAGAACT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

GCGATTGAAT	TCTAGACCAC	CCCGCACTCC	AGCCTGGGCA	ACAGAGCAAG	ACTCTTCTT	60
AAAAAAATTA	AAAAAAAAG	GAGTACCCAT	TGGGATAAAC	CTCTTGGAG	GAGAGGACAT	120

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGAT	180
TACCCCTGCC TGCTGTTAG ATACTTACAT GGACACTAAT TTCTGCCAT CAAACCTCCCT	240
CTCTTTCTCC TTCAATGCCC ATCAACCTCC CCCTTTCT CCATCAATGC TATGTTGGTT	300
TTTTTTATTT GCCATCTTGG CAGGTTTAGG GCAGAGCATG CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:470:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

GAATTCCGCC TTCATGGCCT AGGATTTCA GCAAGAATTA AATTATTCTG CATATTGGAC	60
AGGGCCTATT TAGAGGCCCTG CACATCTGTT TTTATCCATT TGTGTAAACGA TACCGTGTGT	120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTTGTTG	180
CTGTGGATTC TCACCTTGAT GATTCACTGTT TGTGTGATGG AGGTGTCTGC CAGAGAATTC	240
CTGGCCACCC AGCTCCTCA CGCCCTGCC CCACCCCCAA TACACACACC TTTCTCCATT	300
GTACCAAGATG CTGGTCTCGA G	321

(2) INFORMATION FOR SEQ ID NO:471:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 417 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

GAATTCCGGCT TCATGGCCTA CTTCATTACAC TGAAAACCA ATAGCAAACA ACGGAAGAGA	60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCT	120
CGGAGAGACA CTCCCACCGA AAAGTTCTGC GCAAGTGGCCG CCATTGGCAC CCTGGAAAGGC	180
AGCCCCCCCAG GTATCTCCAC CTCCCTTCTT AGGAAGGTGC TGGGCTGGCC CCTCAGGCTG	240
CGGAGGGACC TGTGTAACTG GATGCAGGGA CTCCCTGCAAG CTGCTGGCCT CCATATCAGG	300
GACAATGCTT ACAACTACTG CTACATGTAC GAGCTCTGA GCCTGGGGCT GCCACTCCTC	360
TGGGCGTTCT CTGAGGTCCT GGCAGCCATG TACAGGAAT CTGAGGGCTC CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:472:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

GAATTCCGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCGCAAGC TCATTGAGAC	60
GCAAATGAA CGGTCAAAAG TTGTGGACG AGAGACCAA ACCAAAGCTT ACAGCAAAGA	120
GGGCCTGGGC CTGGCCAGA AGGTAGATCC TGCCCAGAAG GAGAAGGAAG AGGTTGGCCA	180

GTGGCTCACG AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTG AGAGTGAAGT	240
GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCAGC AAGGATCAGA AGCAGGACCG	300
GATTGAGGGC TTGAAGCAGC AGCATCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCCGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG	60
TATACAGCAG TATGTGTTG AGAAATTATT TTAATATAAA GAATTATCAA AAATTATAAG	120
AAGACCATCC CTTAACCTGA ATAGTTTCAC CAAAATCAG AAAAATATGT AAGTGATAACA	180
TTTTGTTTCT TGGATATAGC AATGTACAC CCTGCATAAA TGAGACTATT AAAATGATCA	240
CCTGAGGTCA GAAGTTCGAG	260

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCCGCC TTCATGGCCT ACAAGATT GAGGAAAGA GGTTCAAATT GGACCACTCA	60
GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTCAG ATTGGTGGGG AACTGACCAA	120
GATAACCTTG ATTTGGCCAA TGTCAATCTT ATGTTGGAGT TACTAGTGCAGA GAAGAAGAAA	180
CAACTGGAG CAGAACATCACA TGCAAGCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT	240
GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTGGAA	300
GAGGATATTA AGAGAGTGGAGA AGAAATGAGT GGCTTATACT CTCCTGTCAG TGAGGATAGC	360
ACAGTCCCTC AATTGAAAGC TCCCTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA	420
TACAGCCAAC CTCCAGGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT	480
AGCACGTTAG CATCAAGACT GAAAATCGA G	511

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCCGCC TTCATGGCCT AGTCACAGCT GTCTATTGTTT GTCACTGTGCG GAACATTGTT	60
CATCGTGATT TAAAGCTGA AAATTTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA	120
GATTTGGTTT TCAGTAACCT CTTCACTCCT GGGCAGCTGC TGAAGACCTG GTGTGGCAGC	180

CCTCCCTATG CTGCACCTGA ACTCTTGAA	GGAAAAGAAT ATGATGGGC CAAAGTGGAC	240
ATCTGGAGCC TTGGAGTTGT CCTCTACGTG	CTTGTGTGCG GTGCCCTGCC ATTGTATGGA	300
AGCACACTGC AGAACATCGG GGCCCGCGTG	CTGAGTGAA AGTTCCGCAT CCCATTTC	360
ATGTCCACAG AATGTGAGCA TTTGATCCGC	CATATGTTGG TGTTAGATCC CAATAAGC	420
CTCTCCATGG AGCAGATCTG CAAGCACAAAG	TGGATGAAGC TAGGGGACGC CGATCCCAC	480
TTTGACAGT TAATAGCTGA ATGCCAACAA	CTAAAGGAAG AAAGACAGGT GGACCCCCCTG	540
AATGAGGATG TCCTCTTGGC CATGGAGGAC	ATGGGACTGG ACAAAAGAAC GACACAGAAC	600
GGGGCTCGAG		610

(2) INFORMATION FOR SEQ ID NO:476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GGAGATTGGC CACCTCCAAG ATATGGTAAG	AAAAAGTCAA CAAGGTCTTG GCTCTGCAGA	60
AGGACTTATT GCTAGTCCTTC AGGACTCCCA	GGAAAGCCTT CAGAATGAGC TTGACTTGAC	120
TAAAGACAGC CTAAGGAGA CCAAGGATGC	TCTATTAAAT GTGGAGGGTG AGCTAGAAC	180
AGAAAGGCAA CAGCATGAAG AAAAACATTGC	TGCCATGAA GAAGAAGAGA AGCTCAAAGT	240
GGACAAAATG GCCCATGACT TAGAAATTAA	GTGGACTGAA AATCTTAGAC AAGAGTGTTC	300
TAAACTTCGT GAAGAGTTAA GGCTTCAACA	TGAAGAGGAT AAGAAGTCAG CAATGTCTCA	360
ACTTTTGAG TTGAAAGATC GAGAGAAAAA	TGCAGCAGAG AAACCTCGAG	409

(2) INFORMATION FOR SEQ ID NO:477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GTATGCCTGT TCCAGACCAG CCTTCATCAG	CCTCAGAGAA GACGAGTTCC CTGAGCCCCG	60
GCTTAAACAC CTCCAACGGG GATGGCTCTG	AAACAGAAC CACCTCTGCC ATCCTCGCCT	120
CAGTCAAAGA ACAGGAATTA CAGTTGAAA	GGCTGACCCG AGAGCTGGAG GCTGAACGGC	180
AGATCGTAGC CAGCCAGCTG GAGCGATGCA	AGCTCGGATC CGAGACTGGC AGCATGAGCA	240
GCATGAGTTC AGCAGAAAGAG CGGATACCTCG	AG	272

(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

GAATTCGGCC	TTCATGGCCT	ATGCGTGGGG	GTGGGGGGC	AGGCTAGAAA	GGAGCCCTCC	60
CTCCCTCGGGG	TGTCTAGGGT	GTGCTGGCCA	CTGAAAGATT	GGAGTCGCTG	ACCCACTGCT	120
GACCCTGACC	CTTGGCTGGG	TCCACTCTGC	AGACTCCACC	TGAGGAGACC	CACCCAGGGT	180
GAAGCTCGGT	GCCCAGGCCT	GAACTGAGCC	CGGCCGGGTG	CAAGGGCTGA	GGTGTGAGGT	240
CGGCCAGGC	CTCTTCCAG	GCCTGAGGGT	GGCTACAGCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:479:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

GAATTCGGCC	TTCATGGCCT	ACTAAATTCTT	CCAAAACGTT	GATTCATGATA	ATACAGTGTT	60
ATGTGCAATG	GATAAAATGC	CGTTATTCTA	AAAATTAATAA	TTCTCATTTT	CTTCTTTTTT	120
TTTCCCCCT	GCTCCACACT	TCAAAACTCC	CGTTAGATCA	GCATTCTACT	ACAAGAGTGA	180
AAGGAAAACC	CTAACAGATC	TGTCCTAGTG	ATTTTACCTT	TGTTCTAGAA	GGCGCTCCTT	240
TCAGGGTTGT	GGTATTCTTA	GTTAGCGGA	GCTTTTCCCT	CTTTTCCCA	CCCATCTCCC	300
CAATATTGCC	CATTATTAAT	TAACCTCTT	CTTGGTTGG	AACGACCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:480:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

GAATTCGGCC	TTCATGGCCT	ATTTAAAGAA	TGTTCTTCA	TTAAAAGACC	AAAAAGAAAGT	60
TAAAACCTAA	ATTGGGTGAT	TTGGGGCAG	CTAAATGCAG	CTTTGTTAAT	AGCTGAGTGA	120
ACTTTCAATT	ATGAAATCTG	TGGAGCTTGA	CAAATCACA	AAAGGAAAAT	TACTGGGCA	180
AAATTAGACC	TCAAGTCTGC	CTCTACTGTG	TCTCACATCA	CCATGTAGAA	GAATGGCGT	240
ACAGTATATA	CCGTGTTCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:481:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GGAGCAGGAA	GAAATGCAAG	AGGAGATGGA	GAAGCTGCAG	GAGGAAACG	AGACTCTCAA	60
GAACGAGATC	GATGAGCTGA	GAACCGAGAT	GGACGAGATG	AGGGACACTT	TCTTCGAGGA	120
CGATGCTGT	CAACTGCAGG	AAATGCCCA	CGAGTTGGAG	AGACCCAACA	AAAATGCGC	180
GATCCTGCAG	TACCGCCTCC	GCAAAGCCGA	GCGAAAAGG	CTCCGCTACG	CCCAAGACCGG	240

GGAAATCGAC GGGGAGCTGT TCGCGAGCCT GGAGCAGGAC CTCAGGTTG CAAAGGGATGT ATCTGTGAGA CTTCACCATG AATTAGAAAA TGTTGAAAGAA AAGAGAACAA CAACAGAAGA TGAAAACGAG AATCTCGAG	300 360 379
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(2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCCGCC TTCATGCTTT CTAGGCAAGA GGTCAATCAGA AGATTGAGAG AAAGAGGAGA ACCAATCAGA CTATTTGGAG AGACTGATTA TGATGCTTTT CAACGTTAA GGAAAATAGA GATCCTCACA CCAGAAGTTA ACAAGGGATT GAGGAATGAT TTGAAAGCAG CCTTGGATAA GATTGATCAG CAGTACCTCA ATGAAATCGT CGGCCTGAG GAGCCTGGAG AGGAAGACAC ACAGAAATGAT CTGAAAGTTC ATGAGGAAAA CACCAACATT GAAGACTCAG AGGCCCTCGA G	60 120 180 240 300 301
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(2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 168 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG AAATGCTTTG GTTTCATCTT TCATTGCTGC AAGGAACCTTC CATGCCTCTA ACACTCATCT TCAAAAGACT GGGACTGCTG AGATGCTCTC TATTCTTGAA GAGCGTATTG TTGGAGCTGA TACCTCTGTT GATCTTGAA AAACGGGCT ATCTCGAG	60 120 168
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(2) INFORMATION FOR SEQ ID NO:484:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 452 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC CATGGAAACC CCTGCCAAAA CAGAAGAGAT AAAACTGGAA AAGGCTGAGA CAGAGTCCTG CCCAGGCCAA GAGGAGCCTA AATTGGAGGA ACAGAATGTT AGTAAGGTAG AAGGAAACGC TGTAGCCTGT CCTGTCTCCT CAGCACAGAG TCCTCCCCAT TCTGCTGGGG CCCCTGCTGC CAAAGGAGAC TCAGGAAATG AACCTCTGAA ACACCTGTT AAAAATAAAA AGTCATCTTC TCTTTTGAAAT CAAAACCTG AGGGCACTAT TTGTTCAGAA GATGACTGTA CAAAGGATAA TAAACTAGTT GAGAAGCAGA ACCCAGCTGA AGGACTGAA ACTTTGGGG CTCAAATGCA AGGTGGTTT GGATGTGGCA ACCAGTTGCC AAAAACAGAT GGAGGAAGTG AAACCAAGAA ACAGCGAAGC AAAGGACTCG AG	60 120 180 240 300 360 420 452
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(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

GTTTGTAAAT CACCTGATGA TGGTGATATA GCTGTGCCA ACGAAATGTC AAGGGAAGTC	60
TGCTGGGAA GGTAGACGTA GGATAGGAGT ATTATTCACT CAAAAGCATG	120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCCTCACT GGATGTTGTC ATGTCGTAT	180
GTACTTCCTG GAACTGTGCG ACCATCTTAC AACATGAAA GGAGCTACA TGAAATCATG	240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTGA TGTTAACGGA	300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTTACCC CTGGTGCTCG AG	352

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

GAATTCCGCC TTCATGGCCT ACTCAGCTGG AAGCTTACT CCCTCCTCGA CAGAAAGTGA	60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT	120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCAGT	180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT	240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTTAATGGCC TTGTGTTGG GATGTCCTGT	300
GTATGTTGTC AGCATTCTTA ATTGCTGAGT GTCTTTTGG CTTTCTTTT GGTTGTAACT	360
TAAGTTATAG CTTAATTAT ATTAAAGTATA AATCACCTCT AGGCCTCGAG	420

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

GGAGTGTCAA GAATAACCGC TCAGGTTGAG TGTAAAAATA TTTTATGGTC CCATCAGCAT	60
CAACCTGCCCT TAATGCTTCT TTGGTTGCTCT TTTCAGCTAG TTCTTATTTT ACACGACATG	120
ATATATGAAG TGATTCACA CCATGCCAA GATACGGGCC ACCCACCAGC TACATGGCAT	180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC	240
CAGGGGTTCA CAGATCTTCT GGCACTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT	300
TCCTTCGCT GCCTCGAG	318

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

GAATTCGGCC	TTCATGGCCT	AGGTGTTGC	TTTAAGGAGG	AATAGAAAAA	TCAGGTGGTC	60
ACTACTACAA	GGQAAGGGG	AATGTGGTTT	CAAAAAGGGT	TTGCCTTAT	TTATTTTTAT	120
AGTAGATACT	TATTAATCAA	ACATTTAAGA	GCAACTCAGT	AAGTATTGTT	CCAGAACGAA	180
CTGTTCTCAA	GACTAGGTTT	ACTGCTTGAC	ATTAGAGGTT	AAGGTGTTGC	AATTCTGAGT	240
CTTGTGTTTT	ATTACTACCA	ACCCCCACCC	CCGCCGATAT	TACTTCATCT	CCCTCCAAGG	300
TCACTGAAGT	TTTCATAAAC	GATATTGCAA	AAATGTACA	GTAAATTAAAC	360	
TATCCTTCTT	GCTGGCATG	TCAAAGTGT	TTCTATTATT	ACAGATAATG	CTGCAATGAA	420
TCTTTATTTA	TATAATACAC	TTTATCCAG	TTGTCATT	TCCTTTGTCT	TATATTCTCA	480
CATGGAA						487

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

GCGATTGAAT	TCTAGACCTG	CCTCGAGACA	AAAACGTGTA	ATAGTGAGTG	ATTTAAAAAA	60
AAAAAAATAAA	CTGAAGGAA	AATTGTTGAA	TGTTTGAATC	TTGCCTAGTC	CCCTCACCCC	120
CAAGGCTGGC	TTCTAGAGTT	AAGCTCGAG				149

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

GCAAATTTG	GAAGATTTAG	ACCATTATTT	CTAAAATAT	TTCTTACCTG	CTCTCTCCTC	60
TTTCTCCAC	TCCTCCCCAT	CACCTTCTGG	CACTTCATT	GTTCATATAT	TGATATGCTT	120
AATGATGTTT	CTGAAGATT	ATTCAATT	TTCTTATTC	TTTTTATTCT	GTTCCTCAGC	180
CCAGATCATT	TCAATGCACA	TATCCTCAAG	TTTGCTGATT	TTTCATTTC	CTGCTCAGAT	240
CTGCTGCTGG	CCCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 320 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GAATTGGCC	TTCATGGCT	ACAAATGTTT	AATCAGAGAC	TCATATTCA	CTTTAAGTAA	60
AAAACATACT	TCTTTCCCC	TAATAGTCAC	AGCATTCTGC	AGAGCTAAAG	AAGGAGACCA	120
GGAGTCTGTG	GGAGCAAAGA	TCATTTGTG	AAGCTAGAGG	TCCAATTAA	AAGCAGTTGC	180
TGCTACAAAT	AAAAACATAT	TTGCATTCTG	CCTAAATAG	TTGTCTCTT	GAACGTTGG	240
TGCCCTTTTT	AGGTTGCTT	GTGAATAATA	TGCACAAAAT	GAAAATGTTA	AAAAAAACAT	300
GTAGCCTGCT	AACCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

GAATTCTAGA	CCTGCCTCCA	GCCACTTCAA	ACCTTGTTG	ACCAAAGTGG	GGTAAAAACA	60
AGCACCTGCG	TGCGTTGCG	TTATTCATG	CTCTCCAATA	TATATAATT	TTAAGGAAGTT	120
TTTCTTGAGG	TGGTCAGTTC	TTAACCAAG	AAAGTGGTAG	TAGTTGATT	TAATTAGTGT	180
AAAGTTGTCT	TCGTAACCTTC	CGTGTGTT	GGAAATAGCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTGCCTT	CATGGCCTAC	CGAATCAGAC	AGAAGAAAGC	CCAGGGCTCC	ACTTCTTCTA	60
CAAGGTTGCA	TGAGCCCGAG	AAGAATGCCA	GAGAAATAAC	ACAGGACACA	AATGATATCA	120
CATATGAGA	CTCTAACCTTG	CCCAAGGGGA	AGAAGCTGC	TCCCCAGGCT	GGGGAGGCCA	180
ACAACCACAC	GGAGTATGCC	AGCATTCAAGA	CCAGCCCGCA	GCCCGCTCG	GAGGACACCC	240
TCAACCTATGC	TGACCTGGAC	ATGGTCCACC	TCAACCGGAC	CCCCAAGCAG	CCGGCCCCCA	300
AGCCTGAGCC	GTCCCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

GAATTCTGGCC	TTCATGGCCT	AGGTAGCTCT	ATGGTTTCC	TCGCCTTCTT	GAGTCGGAA	60
ATGCCCGCTG	TGTGGTTGCA	ACGGAGATAA	ATTCCCGAA	CCGGATTCC	GCGTGTCA	120
AATTGAAATT	TAGAGTTAA	TTTCTCAGAG	CATTCTCTCC	AGGAAGAATT	TTTACAGTAT	180
CTCAAAGACT	TCACTTGACT	TCTTGATCT	GCATAAAACC	AAGGAGAAAA	GAAATGGGTC	240
GCTCCAATT	TAGATCACAT	TCTTCAAGGT	CAAAGCTCTAG	ATCACAGTCT	AGTTCTCGAT	300
CAAGATCAAG	ATCTCATTCT	AGAAAGAACG	GATACAGTTC	TAGGTCCTCGT	TCCAGAACAT	360
ATTCAAGGTC	TCGTAGTAGA	GATCGTATGT	ATTCTAGAGA	TTATCGTCGC	GATTACAGAA	420
ATAATAGAGG	AATGAGACGA	CCTTATGGGT	ACAGAGGAAG	GGTAGAGGG	TATTATCAAG	480
GAGGAGGAGG	TAGAAACCCCT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

GAATTCTGGCC	TTCATGGCCT	ACCAACTTAG	TCATTTGAAG	CCCAAGAGTC	TAATTTATA	60
TGCCCTGCCA	ATGTCCTCAT	CTATTGCAGA	ATGNATAATT	ATCTATTGT	TTTGGACTAT	120
ATGTTACAAA	AATTAAAAC	ATAAGATCCT	CTCTCTATAT	TTCATTATTG	GTGAACCCAC	180
ATTGCTCGAG						190

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

GAATTCTGGCC	TTCATGGCCT	AGGTAAAGAAA	ATCGTCAATG	AATTGTGGCA	TGACCAGGTG	60
GAGAGTAAGT	GTCATAAAGA	GGGATAGTGG	ATAGTATAAT	GTCAGGCACC	TCAAAGGAAC	120
TGGGCAGGGG	GTTAGGGAGT	AAAAAGGGCG	GTGGCTGGA	AGCAGAAAGG	AGGAGCAGTG	180
GTCCAGTAGG	GGCTGCAGAG	CTGCAAGGCT	TTGCCTCAAT	CCTGTCAAAG	GCAACTTCAA	240
GCTTTCCAGG	AGCCATACTC	CTTCATTGTT	TCATTACTTT	CTAGATTAGG	AAATCACCAC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

GAATTCCGCC	TTCATGGCCT	AGGTGGACCA	ATGTACAGCA	CTCAGGTTCA	TGGCCA	ACTG	60
GGTGGACTAT	TTCAGTACTC	TACAGGTGCC	TCAGTGGAGG	GAGAGCCCCAT	TGTCCAGGTG		120
CTTCCTGGGA	CAATACCAGA	GCGCTCTGGG	AAAAGGGCTG	CTTGCAAGGCA	CGAGGGCTCA		180
CAATGAGCCA	TGGTGGGCCA	CCGCCACGGC	CCATGCAGCC	TAATAGCAAG	CCAAAGCAGG		240
AAGCTGTGAG	AGCTGCTCAA	CAGTCCCCC	TAGGGACTGG	TTACTTCCTG	ACCCCTAACCT		300
CCGGAAATCT	GCTGTCAAAG	GCAGATTCT	CGAG				334

(2) INFORMATION FOR SEQ ID NO:498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

GAATTAGGGG	CTTTTCATC	CTTAGGAGAC	CTGAGTCCTC	AAGAAAACCC	TTTTCTGGAA		60
GTATCTGTC	CTTCAGAACA	TTTTATAGAA	AAGAATAATA	CAAAACACAC	AACTGCAAGA		120
AATGCCCTTG	AAGAAAATGA	TTTTATGGAA	AAACACTCGAG				160

(2) INFORMATION FOR SEQ ID NO:499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

GAATTCCGCC	TTCATGGCCT	ACTCGATCTC	CTGACCTCGT	GGTCCACCCG	CCTCGGCCCTC		60
CCAAAGTTCT	GGGATTACAG	ACGTGAGCCA	CCGCGCCCGG	CCTTGTCCCTG	GATTTTTTAA		120
CCAAAGCACTA	TTATTTATAG	TTGCCTTAAA	ATAAAATAGG	ATGGGTTTGA	TAAGTCACCA		180
CTTGGTCTT	AAATTCTGC	CATCATCTT	TCTAGGAGT	TAAGATATAG	AGATACACAT		240
AAGCAGAAAA	TTTTTTTAA	CATGAGGATA	CTCGAG				276

(2) INFORMATION FOR SEQ ID NO:500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

GAATTCCGCC	TTCTGGCCTA	GACCTGCCCTC	TGATATGTAC	TTGGTTTTTA	AAAACCCATT		60
TTGTTCTCTC	TTGTTTCCCTC	TCTATTTCAG	CCTAGTATCA	GAAGGCCAGG	CGAGACTGCA		120
ACACTGCTCA	TCACCCCGCG	GCGTGATCCC	TGCTCTTAGG	TGCTGGGCAG	AGGGGAAGGG		180
TGGTCAGGGT	GAGGATGGTG	AGGGAGGGCT	GGTGAGGGC	TCAGAGGAAT	ACTTGGAAACA		240
ACAGCACTGT	CTCGAG						256

(2) INFORMATION FOR SEQ ID NO:501:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 635 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

GAATTCTGGCC	TTCATGGCCT	AGTGGTTTG	TTGTTGTTGT	CGGAGACAGG	GCCTCGCTTG	60
GTCTCCCAGG	CTAGAGTCA	GTGGCATGAT	CACGACTCAC	TGCAGTCTCG	ACCTTCTGGG	120
CTCAAGTGT	CCTCCCTGTGT	CAGCCTCCC	CACAGCTGGG	ACTACAGGCA	CATGCCACCA	180
CATCCAGCTA	ATTTAAAAAA	CATTTTTTTT	GTAGAAATAG	GGTCTTACCA	TGTTGCCAG	240
GCTAGTCTCA	AATTCCGGGG	CTCAAGCAAT	CCTCCACCT	CACCTTCCC	AAGTGCTGGG	300
ATTACAGGCA	TGAGTCACCA	TACTTGGCCC	GAGTGAGCCA	AGATTGCA	ACTGCAC	360
AGCCTGGGCT	ACAGAGCAAG	ACACTATCTT	AGATCCNAA	AGGAAAAAAA	AAAAAGAAGG	420
AGAAAGAACCC	AGAGAAACAT	AAGGAAGGT	GAGAGGAAGA	AAGAAAGATG	CAATTGCGGA	480
AGAAATGAAA	AAGAAATGAA	TAAAGAATAA	AAATAATGTA	CGGTCATAAA	ATAGGACTTG	540
TGAAATGGAGG	CCTTTAGGCC	AAAGGCTATG	ATTAATTCA	AGCTATGTTA	CTGAAGTCCA	600
TAACACAAAGG	ACTCAGATCT	AAATGGTAC	TCGAG			635

(2) INFORMATION FOR SEQ ID NO:502:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 452 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAATTCTGGCC	TTCATGGCCT	ACCCGTAGAA	ATCCCCCTTT	CTCTAATAGC	GAGGCTCTAA	60
CCACACAGCC	TACAATGCTG	CGTCTCCCAT	CTTAACCTCTT	TGCCCTTGCC	ACCAACTGGC	120
CCTCTCTTCA	CTTGATGAGT	CTAACAGGAA	AGGAGAGTCT	TGCAGTGATT	AAGGTCTCTC	180
TTTGGACTCT	CCCCCTTTAT	GTACCTCTTT	TAGTCATTTT	GCTTCATAGC	TGGTCCCTGC	240
TAGAAATGGG	AAATGCTAA	GAAGATGACT	TCCCAACTGC	AAGTCACAAA	GGATGGAGG	300
CTCTAAATTGA	ATTTCAAGC	ATCTCCTGAG	GATCAGAAAG	TAATTCTTC	TCAAAGGGTA	360
CTTCCACTGA	TGGAAACAAA	GTGGAAGGAA	AGATGCTCAG	GTACAGAGAA	GGATGTCTT	420
TGGTCCTCTT	GCCATCTATA	GGGGCGCTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:503:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GAATTCTGGCC	TTCATGGCCT	ACAAAATTGT	CTTGACATAA	GTAATTGGG	TATGCTGTAT	60
AAAGGCTTCT	AAGAATTAAG	AAACATGGCC	CGGGTTGCAA	ATTTAATGC	ATGACTACCT	120

TTTTTTCTAT AGAATATAGC TTTTGTCAAG TTCTCAGCAG TGGCTCTGAT CCAGAAAACA	180
TTAAGAACCA CTGGTCATGA GTGGTGATT TCAGCTTTT TGGTCTTAAC CCACTTAGGT	240
GGGACAGAAAG CTCCTTATCT CACCTATAACC ATCCAGCATC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GAATTCAGCC TTCATGGCCT AGAGGGTTT AGGATTCAA GCAAAGGGGA GACAGCTACT	60
AAAGTAAACTA CAAAATAATT GCTAAACTGA AAATTGTATA AAGTGTACTG GACAGATGAT	120
GTTCTTAATT CTTATCCATG AAATATTTTC TGCCCTTCTTA GAGGAATAG CACCTGACAC	180
AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAAAAAAG	240
AATCAATTAG AAATTCCACT GAAAATTCTT CTTAAATATA ACCAACTTCA TTATGACAAG	300
CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA	360
TGCCCTTAAAT TGTTGGATT TTTATTGTT TTGTTCTTGT TTGGAGATG GGGTCTCACT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

GAATTACTCA GTTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTGAA ATCTAAACA	60
TTCTTCCCAC CACATCCTTT TGACTGTTGA CCTTGGTTTT CTCTCTAAG TTTCTGTCCC	120
TCTGCTTCCT TACTTTTTT CCTTTTGAA TTCTATCTT ATCTGCTTT TGTTCACTTT	180
TTAATGCTAT ATATGGATCT CGAG	204

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCAGA TGTACAGTAA TAAGTATGCA	60
CAGAAATGTT AGATTATTT TGAAGATGTT GAGAAACTAC TGTTATTTT GCTTATATTC	120
TTCTCTAAA ATTCACTAAA TGAATAACAG TTATTGGTT TGCTATTCAA GATAATTATA	180
AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG	218

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

GAAGTTAAC	ATTCAACTG	TTGGTAAAAT	CTCCCTGGTG	CCACCTTGTC	GCACCCCCCT	60
GTATGAGC	ACAGTTAGTG	GGTTTATGAG	AGGTTTGTTC	ACTGAAGCTC	CTGCCACTGT	120
AGACCTAAAT	GTTTCTCTCC	CTGTTGAAGT	GACCTGCCCT	CCTCTTGTAGT	ACCTAACACA	180
GTGGAAG	AGCATGGCTA	ACTCAAACCC	TTTTCTTGG	GGGCAGGCTT	CCCTTTCTCT	240
CTGGCAGGTA	TATTAACAAAATA	GTAAATTGTC	CAAATTTC	TTGGTGTGTA		300
GCAAGGCATA	AAGACTGAAA	AATATCTTAT	GAATTAGTTC	ACTTCCCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

GAATTCGGCC	TTCATGGCCT	AAAATGATAC	AGTGTGCAGA	ACTGGACCCA	GTACGGAATG	60
ATAAAATGTA	CAGATGTGCA	GAACAGGACT	TGGTAGGACT	CAGCAGAGAA	AACAGGAGGA	120
GAGATGAAAA	TGATATGGTG	TGCGAGACTG	GACTCAGTAA	GGTGCGGAAA	GGGGAAGGAT	180
TCTGACAGAA	TCCAGCACAA	AAACAGAGAG	GGTGCAGAAA	AAGAGATTG	GTCACTTAGA	240
CGTGTGGAGT	TGGAGGAGCC	TGTGGGAAAT	CCAGGATCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

GAATTCGGCC	TCATGGCCTA	CTGTCCTTTC	TTAACTGTG	TACTTGGGG	CACTTTTGAT	60
TTTGGTCCCA	CATCATTGAG	GAAGCTGGCC	CAGAGTTCTG	CCTCTTCTT	TTTCTGGCA	120
TCCTCTGATC	CAATGCCTT	TTCCCTGCTCT	GCAGCGTCAT	CTTCCTCCCTC	ACTACTGCTT	180
CCCTCAGATT	CTGAATTGGC	ATCCCTCTCT	TCCTCTTCTT	CTAATGAGAG	GCCACCTTGT	240
CTTCTCTTCC	TGCGTGGAAAT	GCTCTGGGCC	TTTCTTTTTT	TCCCCTGGGT	TTTCTGTGTC	300
TGCTCTTCAC	CATTAGGCCA	TGAAG				325

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GAATTCCGGCC TTCATGGCCT AGACAGGAGG TCATTGGGA TTTTAAAGG TTACACTGGA	60
TACATTTCCA TTAAGCTTCAGATATCCA CAGGTCCATT CTGTGTGAAA TCGTCTAAAA	120
ATTCCTGTT CTCATGCTTC ATTTTTCTC TTTAGTAATA TTCTAATTG TGTAATAG	180
TATTTCTTT CATTATCTT AATTATGTTA TATTAAGATA TCATGTGTAT GCTTAAATTA	240
TACTTTGGG CTTCAAATGA GTGACCCCCAC TCAGACTCGA G	281

(2) INFORMATION FOR SEQ ID NO:511:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

GAATTCCGGCC TTCATGGCCT AATTCCCTTG ACTCAAGACA GCTAACCTCA TTTTCAGAAC	60
TGTTTAAAC CTTTGTGTGC TGGTTTATAA AATAATGTGT GTAATCCTTG TTGCTTCC	120
GATACCAGAC TGTTCGGCGT GGTTGGTTAG AATATATTTT GTTTGATGT TTATATTGGC	180
ATGTTTAGAT GTCAGGTTA GTCTTCTGAA GATGAAGTTC AGCCATTTG TATCAAACAG	240
CACGCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:512:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 233 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

GAATTCCGGCC TTCATGGCCT AATTGATTCT AATCTTCCC AAACAGTGCT GTGGCAATGT	60
ATGAAAGTAA TAAAAATAAT CCTTTTCTG TTAAAAAAA AATTGCTGTT ACTTGCTGTT	120
TTGTTATGCT TTGCTGGAG ATTTCCAC CCATCTAAA GCAGCAACTT CAGGATGGGG	180
GAATCAAGCA AAACCATGGT GAAGAGATT ATTAAAGAG GACAAGTCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:513:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 358 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCCGCC	TTCATGGCCT	AGTCACCTTT	TGTGGGAACT	TCTCTCAGCG	AAGCGGAGCA	60
TGCGAATTG	ACATCATGAT	TGTCTGAAAA	TTGGTAAAGCC	ACTATCCCAG	AAAGAGCTCC	120
CTATGCCAG	GGCTTGCAAT	GCTAAGAGAA	GGAGGCAGGA	GAGAGACAGG	GAGGCACACT	180
ACATTTGGTG	GGGTGAGGAT	ATGAGGTTCC	TTGGACATCA	TGGCCTCCAG	TGAAATATGTG	240
GGTGTATGGCT	TGGAACCTTAA	GCTTTTTGCG	TAGTCCCCCA	CAAAAGAGTA	CCCTCCACAA	300
CCCACATGTG	GACCCACAGCA	GTGCCTCTCA	ACAAAACATGT	GCCCCAAGGA	GTCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCCGCC	TTCATGGCCT	AGAATAGAGG	AAAATAGCCG	CCTGGTGGCT	AGACAATTAA	60
GGTGTAGAAA	ACACATTAT	ATGGTTCTTT	GAATGTAACA	GTGGTAAAGA	ATATAAGTTT	120
AGTTGTTGCT	GCTAAGTAGG	GGGAAATGAC	ATTTTATCT	GGTATGTTG	AGAATAAAAGT	180
AAATTTCAA	ATTTGAGATG	ATCGAAGTTT	TTATTTATAA	ACTTAAGTAT	TATTATAATA	240
TGTTACATAT	TTTATTCTTT	AAAAATTGTA	ATTCAAGAGAG	TGTAACAAAA	TGTACTTCCT	300
CACTTTCTTG	CTTTTTGTTT	CCCAGAACGTA	ACTCGAG			337

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GAAAAAGATGG	AAGAAAACCA	CCATAGCACT	GCAGAAGAAC	TACAGGCTAC	TCTACAAGAA	60
TTATCAGACC	AGCAACAAAT	GGTACAGGAA	TTGACAGCTG	AAAATGAGAA	GCTGGTGGAT	120
GAAAAAGACGA	TTTTAGAGAC	ATCCTTTCAT	CAGCATCGAG	AGAGGGCAGA	GCAGCTAAGT	180
CAAAAAAATG	AGAAGCTGAT	GAATCTTTTA	CAAGAGCGAG	TAAAGAATGA	AGAGCCCACC	240
ACTCAGGAAG	AAAAAAATAT	TGAACCTGGAG	CAGAAGTGCA	CAGGTATTCT	TGAAACAGGGC	300
CGCTTTGAAA	GAGAGAACGCT	ACTAACACATT	CAGCAGCAGT	TGACCTGTAG	CTTGCAGGAGA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

GGCAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT	60
GTCTCAAAAA AGAAAAAGAA AACAAATTCCA GGATIATTAT TTCTAAGTAA ATGTGACATA	120
TTATTCTAT GATATTATTT CTTTGATCTC GTAGCCACAC TGTTCCAAT AATGATTATG	180
AGAAAAAGTA CCCTCTGTT GAAGGAATC ATGGGAAAAA TATAATTCAC AAAGTATTTT	240
AAAATTAAAA TCCTGTGTAT TTCAAAGAC GATGGCCTA TTTTAAGAAA ATAACCTTG	300
CAATTCAATT GCTTTTCAT TGGCTCGAG	329

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

GAATTCCGCC TTCATGGCCT AGTCCTTCA AGTACACAGA GAAATTTCG TTGAATTCT	60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC	120
AGCGGCACCTT CTTCTTCTG TGCTGAAATT CGCGAACAA TCATATCATC TTTTCCAAA	180
TCCCGAAGTA CAAGTTCACCC TTCTCTACAC TGTAATTAA TATCTCGCTC TACAGAATCA	240
TCTTGCTCAAG AGAACTTCTAAAGTCTCA AAAGCTCGGA GAACATATGG ATTTGCATGG	300
AAAGCCCCAG TCTTCTGAC AAAGAAATCA TCATTCCTCA AGTCAGGATC CAGGGCTGCC	360
ATCTCGAG	368

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

GAATTCCGCC TTCATGGCCT ACAGCTGAGAT CAAGATTCCG AGTTGGGCT GCCTAATAGC	60
TGCAATGATA CTGTTGTCCT CACTCACCGT GCACCCCATC TTGAGGCTTA TCATCACCAT	120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTTGCCATTTC ATAGATAATC	180
ACCCCTCATC CTGTGGCCCA TTTCTGACCT CTTCAACGGAC CTGATTGCTT GTGGTTCCT	240
TGTTGGAGCC GTGGTCTTTG CTGTTGAGAAG CGGGCGATCC ATGAATCTCC ACTACTTACT	300
TGCTGTGATC CTTATTGGT CGGCTGGAGT TTTTGCTTT ATCGATGTGT GTCTCAAAG	360
AAACCACCTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG	397

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 640 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCCGCC	TTCATGCCTA	CTTTGGTAAC	AGAAAGAGAAG	ACTGTGGAGC	CAGCTACCGT	60
CTCAGAACAA	GCAAAGCCTG	CATCTGAACC	TGCTCCTGCC	CCTGTGGAAC	AGCTGGAACA	120
AGTAGACCTG	CCCCCAGGAG	CAGACCCCGA	TAAAGAAGCT	CCCATGATGC	CTGCGGGTGT	180
TGAGGAAGGT	TCATCAGGTG	ACCAGCCGCC	TTATCTGGAT	GCCAAGCCTC	CAACTCCC GG	240
GGCCTCGTT	TCCCAGGCAG	AGAGCAACGT	AGATCCAGAG	CCTGACAGTA	CCCAGCCACT	300
TTCAAAACCA	GCTCAGAAGT	CTGAGGAAGC	CAATGAGCCA	AAGGCCGAA	AGCCAGACGC	360
CACTGCAGAT	GCTGAGCCTG	ATGCAAACCA	GAAAGCCGAA	GCTGCTCCTG	AGTCTCAGCC	420
CCAGCTTCT	GAAGATTTAG	AGGTTGATCC	TCCAGTGCT	GCAAAGGATA	AAAAGCCAAA	480
CAAAGCAAG	CGTTCAAAGA	CCCCTGTTCA	GGCAGCTGCA	GTGAGTATCG	TGGAGAAGGC	540
CGTCACAAGG	AAGAGTGAGA	GGATAGACCC	GGAAAAACTC	AAGCGGTCCA	ATTCTCCTCG	600
GGGAGAACGA	CAGAACCTT	TGGAAATTAAA	GACACTCGAG			640

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

GAATTCCGCC	TTCATGGCCT	AGCAAGAGAA	AGAGAAGTGC	AAACACTCCC	ACGGCGAACG	60
GCCCTCCGTG	SACGCAGATC	CCAAGTTACC	CAGTAGCAAG	GAGAACCCCA	CTCACTGCTC	120
CGAGTGCAGC	AAAGCTTTCA	GAACCTACCA	CCAGCTGGTC	TTGCACCTCA	GGGTCACAAA	180
GAAGGGACCGG	AGGGCCGGCG	CGGAGTCGCG	CACCATGCT	GTGGACGGGA	GGCAGCCGGG	240
GACGTGTTCT	CTTGACCTCG	CCGCCCCCTC	GGATGAAAAT	GGAGCCGTGG	ATCGAGGGGA	300
AGGTGTTCT	GAAGACGGAT	CTGAGGATGG	GCTTCCGAA	GGAAATCCATC	TGGATAAAA	360
TGATGATGGA	GGAAAAATAAA	AACATCTTAC	ATCTTCAAGA	GAGTGTAGTT	ATTGTGGAAA	420
GTTCCTCCGT	TCAAATTATT	ACCTCAATAT	TCATCTCAGA	ACGCTCGAG		469

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

GAATTCCGCC	TTCATGGCCT	ACCCGTTTCC	TCTAGTTCT	TCCTGTAGTA	CTCCCTTTTT	60
AGATCCTAACG	TCTCTTACAA	AAGCTTTGAA	TACTGTGAAA	ATGTTTTACA	TTCCATTTC	120
TTTGTGTTGT	TTTTTTAAC	GCATTTACC	AGATGTTTG	ATGTTATCGC	TTATGTTAAT	180
AGTAATTCCC	CGGGCCTTCA	TG				202

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GAATTCTGGCC	TTCATGGCCT	AAATTTAATG	AAGCAAAATT	CCATACATCA	TTTGAAAAT	60
AGTGTTCCTT	TCCCTGATAG	GCCTGTTCTG	CATCATCTT	TTAGCTTCCT	TCTGCCCTGT	120
TTATCACTTG	GTCCCCACTTT	TATATTTC	CTCTTCGGTC	CAGAATTCT	TATTAGTTT	180
CTTGTATTTT	GCCTACTCCC	TCCCTTCTCC	ATGATTCAAGC	CTAGTCTTC	CGTCCTCTGT	240
GGACTTGGGT	GTGCCTTCCT	CTGGGCCAAC	TCGCTTTTG	CTGCTGTTAG	CCCTCCGCC	300
TGGCACCCTG	CAACTTCACC	CTCGCCTG	GTCCACTAC	GTTCCACTCA	GCCCCGTCAG	360
TCCCTGTTTG	TTCTTCTCCA	CCGCCTTGGT	CTCCCGTGTG	TCTTATCTAG	CTCTGGTTCC	420
TTCTCGTCTC	CACATTATT	TTGTTTCTT	CCTGTGCTTG	TTAGTCTTG	TGCACTTGGC	480
CCTTTTCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GAATTCTGGCC	TTCATGCCTA	GGAAATTCA	CCATTTGGTC	TCCCCCTTG	TGGGTAGCA	60
GGTGTCAAG	ACAGGGGCA	GCAGTAAGAA	GCTACAGCC	GCCACCTGC	AGTCTCTGT	120
GCTCCAGGAC	ACCCAGGTCC	ATGGAAAGAA	ATTATTCTT	AGATTTGATC	TAGATGAAGA	180
AATGGGGCCC	CCTGGCAGCA	GCCCAACACC	AGAGCCTCCA	AAAAAGAAG	TGCAGAAAGGA	240
AGGGGCTGCG	GACCCAAAGC	AGGTGGGGA	GCCCGAGGGG	CAGAAGACCC	TTGATGGATC	300
CTCACGGTCT	GCAGAGCTCG	TCCCCCAGGG	CGAGGATGAT	TCTGAGTATT	TGGAGAGAGA	360
CGCCCTGCA	GGAGATGCTG	GGAGGTGGCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

CGATTTGAATT	CTAGACCTGA	CCAAAGACCT	TCCGTACAGA	TTGACCCAG	AATGTCAGGG	60
AAAGTTAGGA	GAAGAAGTTC	TGAGAAGACT	GACTACAGAT	TGGCTGGCT	GGCTGACCCA	120
GGAACTTCTG	AGCAGACTGA	CCTCAGATTG	TATGGCTCG	TTGACCCCAA	AAACATCTGTA	180
AAGACTCACC	ACCAAGTGT	CGGCCAAGCC	ACTGAACCTAG	CTGAACACCA	GGCTATTGAC	240
CAAGCTCATA	CTAACATGTA	TCAACCTCCA	GTTGACAAATG	CTCACTACAC	TGAATCTGAC	300
CAGACTGACC	ACTTAGCAGA	CAGACAAGGT	AATCATAAAG	ACCAGCTGTC	TTACTATGAA	360
ACACGTGGCC	AGTCTGAAGA	CAGAATATT	CCCCAGTTAG	GCAACAGCAA	AGAGGACAAA	420
GAGGCTGACT	ACAGAGTACA	ACCCCTGCAA	TTTGAGGATA	GCCAAGTAGA	CCTCAATTCC	480
AAGCCTTCAG	TTGAAATGGA	AACTCAGAAT	GCAACCACCA	TCCCACCCCTA	CAACCCAGTT	540
GATGCCAGAT	TCACCAAGTA	ATTCCAAGCA	AAAGACCAAG	CTCTTTCCC	AAGACTCGAG	600

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCTGGCC	TTCATGGCCT	ACTTTCTTCT	GCTGGCTTCC	ATCTTGCCAC	ACTTTCTTGC	60
TCTTCCTTCT	AACTGAAAGA	CTACTTCTCC	ATCCCCTCTG	CAGGCTCTTT	TGCTCCACCT	120
GATATTTAAA	TGTTGGAATG	CCTAGAGTTG	TTCTGACCCT	TCTTTATCTA	CCCCGATTTC	180
CTCAGTGATC	TTATGCGAGAG	GTCTCCAAA	GTTTACATGG	CTATCCTTGA	CCTCCTTCCT	240
GAACGTGAGC	TGGTGTCAAG	TGCGCTACT	TGGATTTTA	ATCAGCAACT	CAAGGTTTAC	300
GTGATGATTA	GACCGCAGTT	ACCCCCAGAC	TTCTTTATCC	CTTAGTTTTC	CCCATCTCAT	360
TAAGTTCACT	TCCATTCAACC	TTCTTGATGA	AGCCAAGTAT	TTCAAGACTA	GCCTTGTTC	420
TTCTTTTCA	CTTCCCCCA	TATCAATTCC	AGACTACCCA	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 559 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GAATTCTGGCC	TTCATGGCCT	ACATTGTTAGA	AGAGATCACA	GAAACCACAA	AAGGTTTTCT	60
GAAGTATATG	GATAATCAAT	CATTTGCAAC	TGAAAGTCAG	GAAGGAGTTG	GTTTGGGACA	120
TTCACCTTCA	TCCTATGTGA	ATACTAAGGA	AATGCTAAC	ACCAATCCAA	AGACTGAGAA	180
ATTGGAAGCA	GACACAGACC	ACAGGACAACT	TTCTTTCTT	GGTGTGAGT	CCACACGAGG	240
CAGTGAGCCT	GGAAAGCCTCA	CCCCGTATAA	GGAGAAGCCT	TCGCAGATGA	CAGCTGATAA	300
CACCCAGGCT	GCTGCCACCA	AGCAACCACT	CGAAACTTCC	GAGTACACCC	TGAGTGTGA	360
GCCAGAAACT	GATAGTCTGC	TGGGAGCCC	AGAAGTCACA	GTGAGTGTCA	GCACAGCTGT	420
TCCAGCTGCC	TCTGCCTTAA	GTGATGAGTG	GGATGACACC	AAATTAGAGA	GTGTAAGCCG	480
GATAAGGACC	CCCAAGCTTG	GAGACAATGA	AGAGACTCG	GTGAGAACCG	AGATGTCTCA	540
GACAGCACAA	GGCCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

GAATTCTGGCC	TTCATGGCCT	ACGCAGTGGT	TCAATTCTTCT	TCGAAACGGT	GTGGTCCCTG	60
CAAAGGATG	TTTCTGTCTT	TCATGAGCT	GGCTGAAACT	TGTCACTCA	AAACAATACC	120
CACATTTCAG	ATGTTCAAGA	AAAGCCAGAA	GGTAACCTTA	TTCTCAAGAA	TCAAAAGAAT	180
AATTGCTGT	TATAGAAGTG	GATTGATGAG	CAACCTGATT	TTTGAGTTT	GTGGAGCCGA	240
TGCTAAAAAA	TTGGAAGCCA	AGACTCAAGA	ATTAATGTTAA	GCTGATCTCC	AAGGCAAAT	300
ACACTTGTGC	CGCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:528:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

GGCACAGACT TACCGGACAC ACAGGTCTAT GGACACAGAG TCATGGGGCA CACAGGTTCA	60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA	120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC	180
ACAGGTCTATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG	240
GCTCATGGGG CACAGACTCA TGGGGCAGGG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:529:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

GAATTCCGCC TTCATGGCCT ATTCTGTTCT TTAAATTGTA ATGAAAGTTT GGCATTTAA	60
AAAACCTTTAG GTGATTTAGG AGTATAATT TAAGCAGATT TTTAGAGTAC GAGTGTCAC	120
ATATTTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG	180

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

GGGGACAGAA GATGTGCTCC AGGGTCCCTC TGCTGCTGCC GCTGCTCCCTG CTACTGGCCC	60
TGGGGCCTGG GGTGCAGGGC TCCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT	120
TCTGCACTGC CCGCCAGGG ACCACGGTG CCCCAGACAGT GCCACCCGAC ACGGTGGGC	180
TGTACGGTCTT TGAGAACCGC ATCACCATGC TCGACGGCAGG CAGCTTGCC GGCCTGCGG	240
GCCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC	300
AGCCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCAA CAGGCTGCAT GAAATCACCA	360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTGTA AGGTGTTGTG AAGTGCAATA	420
AGCTGGAAAT ACTGGAGACC ATCGTGGACA GAATAGTAAG AGCCCTCGAG	470

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GAATTCTGGCC	TTCATGGCCT	AGAAAATTCC	AGAAAGGATA	TTTAAGAAAA	TACAATAAAC	60
TATTGGAAAG	TAECTCCCCTA	ACCTCTTTC	TGCATCATCT	GTAGATACTA	GCTATCTAGG	120
TGGAGTTGAA	AGAGTTAAGA	ATGTGATTA	AAATCACTCT	CACTGCTTCN	TACTATTAAG	180
CACTAAAAC	TGTTCTCTAT	TAGACTTTAG	AAATAAAATGT	ACCTGATGTA	CCTGATGCTA	240
TGGTCAGGTT	ATACTCCCTC	TCCCCCAGCT	ATCTATAGG	AATTGCTTAC	CAAAGGATAG	300
TGCGATGTT	CAGGAGGCTG	GAGGAAGGGG	GGTTGCAGTG	GAGAGGACAC	GCCCACTGAG	360
AACTCAAACA	TTTCAAAAGTT	TGGATTGTAT	CAAGTGGCAT	GTGCTGTGAC	CATTATAAT	420
GTTAGTAGAA	ATTTTACAAT	AGGTGTTAT	TCTCAAAGCA	GGAATTGGTG	GCAGATTTA	480
CAAAAGATGT	ATCCTTCCAA	TTTGAATCT	TCTCTTGAC	AATTCTAGA	AAAAAGATG	540
GCCTTGTGCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 843 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

GAATTCTGGCC	AGAGAGGCC	ACTTCTCTTA	GTGATTTCAT	GTTCACACCA	GTACATTGTC	60
GTGAATACTG	AAAATATCTTG	TTTAATTCA	ATAATTAAAA	TGGTGGCAA	GGAACTGTGTT	120
TAGCCAGAGC	CCTCTTGAC	TTTGAGGAAC	AGTGGTAGA	TAAGACTTGA	AGACAGACGT	180
GTAAAAAGTA	CTACTCACTG	GTAGGCTCAG	GTCTGGTTGA	TTGACTGATT	CTTGAGACGG	240
ATATGTCGCTC	TGTCGCTAG	GCAGGAGTGC	AGTGGCCAG	TCTCGCTCA	CTGCAGCCTC	300
CGCTCTCGGG	TCCAAGCGAT	TCTCTGCCT	CAGCCTCCCG	AGTAGCTGGG	ACTACAGGCG	360
CCCCCCACCA	CACCGGGCTA	ATTTTTGTAT	TTTTAGTAGA	GACCGAGTTT	CAAAATATTG	420
GTCTCGAAT	CCTGACCTCA	GGTGATCCAC	TCGCCTGGCC	CACCCAAAGT	GCTGGGATTA	480
CAGGGATGAG	CCCCCTGCGCC	TGGCCTCGGT	TGAATTATTAA	AAACAACTTT	TGTGGGCAGC	540
AAGCTGTACG	AGGTTAACTA	TGTGATGAGA	AGACTTAAAGA	ATGGAGAAAA	GTTTTATCAG	600
TTCTACATAG	GACTTAGTTT	GGGAGTTCT	GGAAACTACG	TTGGAATCA	GTAGTTCAC	660
ACTAGCTGAA	TTCAAGCTG	TAATTTACAG	TGATTTGTTA	TTTACCAAAT	AAGTAGAAGA	720
GGGAATTAAG	AAGCTAAAAT	CTCTGGGTAC	TTGTTTGATA	TGAATTGTT	AATTGTTAT	780
ACTCAGGTA	TAAGTGTAC	CTCAGTCATA	GCATTTAATA	TTTTATCTGA	CTGCTCTCTC	840
GAG						843

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 525 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

GAATTCGGCC	AAAGAGGCCT	ACATCCAGAA	ATTTAGGGAC	TCAGCCCTGG	TCAGGGTGGC	60
AAAGGGTCTG	TTTGTCTTTC	CCCATTAGAC	AGAGGCTCTG	TCCTGCTACC	CTAATTGTA	120
AGGGGTGCC	GGGAAGGGGT	GGTAGGGACA	TGGTGGCGGT	GGAGACTCCG	GCCCCACTTC	180
TC CAGGGCTT	GCTGACAGGG	GCCTGCTTTT	AATTTTTATT	TTTATTCCAT	GACTTTTTAA	240
AAAAGAACATCC	CGTAACCTCT	TTTTCAAAAC	TTTTTGTA	ACTTTTCATA	ATACTGTTT	300
CTACTTTGTT	CCCACAAGTT	TTTTGCCAC	AACGTTTTA	CATTTTTAT	CCCATAACTT	360
TTTCACCCCCA	TAACTTTTT	AAATAAAAGTT	ATTTAATAAA	ATAACTTTT	ATAAAACATT	420
AATAAAAGTT	TTTTAATTAA	CCCATAACTT	TTTTTATTG	GTGTTTAATA	AACACTTGCA	480
TAGTTATATT	ACAACCTTGT	AAAATGAAA	CACATTATCT	CAGGC		525

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

GAATTCGGCC	AAAGAGGCCT	AGAAAACCCT	TGAAGACATG	TTGAAAATAC	ATACTCCTGT	60
TAGCCAAGAA	GAAAGATTGA	TTTTCTTAGA	CTCCATTAAG	TCCAATCCA	AAGACTCTGT	120
GTGGGGAAAAAA	GAATAGAAA	TACTTATAGA	GGAAAATGAG	GACCTCAAC	AAACATGTAT	180
TCAGCTAAAT	GAAGAGATTG	AAAAGCAAAG	GAACACTTT	TCATTGCTG	AAAAAAACATT	240
TGAAGTTAAC	TATCAAGAGT	TACAAGAG				268

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

GGCTTGCAAC	TCGGCGATCC	CCGACTCCCT	TCTTTATGGC	GTGCGCTCTG	TGCTGTGGC	60
CGAAGCTGGC	CGCCTGCGGC	ATCGTCCTCA	GCGCCTGGGG	AGTGATCATG	TTGATAATGC	120
TGGGAATATT	TTTCAATGTC	CATTCCGCTG	TGTTGATTTGA	GGACGTTCCC	TTCACGGAGA	180
AAGATTTGAA	GAATGGCCCC	CAGAACATAG	ACATTCTCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

GAATTCGGCC	TTCATGGCCT	ACCACTCTGG	CCCCAGCGTC	ACTGGCCTAG	GGACACATGG	60
GGGTGGGGAT	TGTTTGGCCT	TCCTGGCTTA	GGTCTCTGGA	AGAGAGAAGA	ACCCCATGGG	120

GCAGACCCAG	GCCACGGGCA	GTACATGCC	CCCACACTAC	TGACACCGCC	AGTGTCTTCT	180
GTGAAGCCAC	CTTGAGCAA	CGGAAAGGAA	GGGGGATGGG	CAAGATCAGT	GCAAGGTTGG	240
CCAAAAGCCT	GGGGCTGGCC	TTCTGCTGGC	ATGAGAGGGC	CAGGCCGCC	CCAGCTCCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

GAATTGGCC	TTCATGGCCT	AGAACAAAAT	CTGAAATTCA	GAATAAACCA	ACAGTTGGAA	60
AATATTTTCC	ATTTTTTCC	CTATTAATAA	TGATAATTTC	AGGTGCAAAG	AGTGTTTTTT	120
TTTTTTTTT	TTTCTCCACA	GTGCTTTCA	CGGTGGGGAC	TAATGGATAT	AGAGGGTGGG	180
AGGCCAGAAT	AACCAAGTAC	CTGGAAGTGA	ATCTTGTGG	AGATAATGAA	ATAATTAT	240
TCGAAAGGTG	AAAAGGAAG	TCTTCATCA	CTAGCTCAGC	TGTTATGGTC	CTTGAACCTGC	300
CCTTGGCCGT	CTGTCCTTTT	ATTAATCCTT	TTTACCTGTC	GAGTCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 344 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GAATTGGCC	TTCATGGCCT	AGAGTTGCAC	AGATGTCTTT	TGTTAGCTTT	GGTGGCGGAG	60
TCATCCTCAC	AGACCGTTAC	TCAGATAATT	AAGTGCCTTG	CAAATTTAGT	ATCAAATGCA	120
CCTTATGATC	CTCTAAAAC	CAGCTGCTG	ACCAAAGTCT	GGAAACCAGAT	AAAGCCTTAT	180
ATTCGCCACA	AAGATGTTAA	TGTTCGTGTG	TCAAGTCTCA	CACTCTGGG	AGCTATAGTG	240
TCCACCCACG	CACCTTTACC	TGAAGTCAA	CTACTCTGC	AACAGCCATG	TTCTTCTGGA	300
CTCGGTAAATA	GCAATTTCAGC	AAACCCCTCAC	CTCAGCCCC	CGAG		344

(2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GAATTGGCC	TTCATGGCCT	ACAACTCCAT	TAAACCACCA	CCAGCTCCCC	AAGCCACCCC	60
TTCAGCCATG	AACTTCCCTG	TCCTGGCTTT	GGCAGCCCTC	GGATTCCTGA	CCCAGGTGAT	120
CCCAGCCAGT	GCAGGTGGGT	CAAATGTGT	GAGTAACACC	CCAGGATACT	GCAGGACATG	180
TTGCCACTGG	GGGGAGACAG	CATTGTTCAT	GTGCAACGCT	TCCAGAAAAT	GCTGCATCAG	240

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAAACCACT GGCAATCAAG 300
GAGAAGAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 248 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GGGATTGAAT TCTGAAGACC TCTCAGCCCT TTATGACCAC TCCTGGCACC CTGTCAAGCA	60
CAGCATCTCT GGTCACTGGC CCTTATAGCCG TACAGACTAC ACCTGGAAAA CAGCTCTCGC	120
TGACCCATCC TGAAATACTA GTTCTCTCAA TCTCAACAGA AGGTGGCATC AGCACAGAAA	180
GGAACCGAGT GATTGTGGAT GCTACCCTG GATTGATCCC TTTGACCAGT GTACCCACAA	240
ATCTCGAG	248

(2) INFORMATION FOR SEQ ID NO:541:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG	60
GTCTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAATGGCT TCTGGTAAGA	120
AAATTAAAGGT CTACTCTCCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAAGAAGT	180
AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAAGGTC CTAAGAAGCA	240
GAGAATGAGA ACTCCAGTTG CTTGTTTAC TCTCAGGCTG AGCATGTTG GTTACAATGA	300
GGGGTAGCAG GAAGAGCACA GCCTTGACT CCAGTCCAAG GAACTCCAGT CTCTCTGCA	360
ATTTCCCAAGT GTTGACCTT GGGCCACTTA CTGTTCTTT CTCAGCCTCC ATTTCATAT	420
CTAAACACCTC GAG	433

(2) INFORMATION FOR SEQ ID NO:542:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 493 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTGGCC TTCATGGCCT AGACACGGGA CATAAAAAT TTTAATGAAG GAGGACACAG	60
CTCAGAGCCC TTCCACATGC GGCCCCAACCC TGCCCCACGG AGACCGGCCA TGCAACCGC	120
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCCAGCT AAGGATGTCC CGGATCTTCT	180
TCTGCCAGTT GGCGATGTCC TTGGACACGG CGCACCAACAG CTCCCCATGC CGAGGCTCTG	240
CACTCTCACA GCGCTTCCTC ACCTCCCTC GCTGCTCCTC AGTGGCATGC TGCAGCTCAA	300

ACTTGTAGAA GAAGGCCAG GCATCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA	360
ACCACTCCCT GCCCTTGGTG ATCTTCCGCT GACTCCAAA CAGCTTGGCC ACGCCAGGA	420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCCTGGG	480
GCCTTGCTC GAG	493

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

GAATTGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAAGGT GAGAAGGGGG GGAAAAAAAGA	60
AGCAAAAAGC CAAAGAAAAA AAACATTTA TATTCTACCTG TATAAACATA TCCGCTAAGG	120
CAAACCGAAT CGGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCCTCTAA TTCTGAGA	180
TTCTAAGGCC AAAAAATAAA ACCTCTGCAA GTCCCGTAG CTTCCAGGAC TCCTGGGCAT	240
TTTACTAAAA TAAAGAGTTA TCGAGTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG	300
AAAGTTGCAT AACTGTGGCC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

GAATTGGCC AAAGAGGCCT AAGAATTCCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA	60
TGGATGAAGA GAGTTAAAT AGATTACATA GAATTTAAAT TAATGTCGAT TGGTTATATA	120
CTGGGCACTG ATAGCTGATT TTTCTTGGG GAAAGGTATG TCAGCCTAGT CATTTCAGATT	180
CCTTTATTTT TTTAAATGTT TTTTCATTTT TTGCTTGCA TTGCATTCTAT TTGCTGAAGA	240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATCT CCTTAGGATA TTGGCCCAAC	300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GGCGTCTGTA TCATGACTAT	360
CATAAATTAA GGATTAAGAC ACCTAGCCTC CTACCAAGGAT GAATGAGGTG TCCATGTGAC	420
CTGCTGTGCC CTGGAATTTT ATACATCTT CTCTCATAGC ACACGGACTC GAG	473

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG	60
TGCTAAATGT TTTATTTCT CTGGAAGAAT AGTTATATTCT TACTCTTGT GGCTCTCGAG	120

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

GCTAGACCTG	CCCCCTTAGA	AATGGAAAAA	GCATGCAAGA	GAGATGTTAA	AGGAGACTAT	60
TGGAGCACT	GTGTCACAC	CCTCTGTGAT	AGAAATGAA	AAAATATCCC	CAGAAGATCG	120
TGGTGAGAAT	ATTGGGAAAC	ACAAAGTGT	ACCCGAGTG	GTAGACATTG	AGAAAATACA	180
TGGAACAGGA	CTAGAATTGA	CCACTAAACA	AGGGGAGGCC	ATGCTCCCTG	CATTGAAAG	240
TAAAACACCA	CAAGAGTATG	CTGAAGGGAG	TGTTGAAGAA	ACAATGGAAA	ATACCTTACCA	300
AAAGGATGCT	GAAGGGGATA	TGGAAAGGC	TGAAGTGTG	CCTGTGAGGT	TAGAAATGGA	360
AAATACTTAC	CCAAAGGATA	CTGAAGAGA	CGGTGGCAA	ACTGAGGTGA	TGCCCCTTGC	420
ATTAGAGGTA	GTAAATACTT	ACCAAAAAAA	TGCCAAAGGT	TTTACCGGGA	ACAATCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

GAATTCGGCC	AAAGAGGCCT	AGAAACCTGA	GGCTGCTGCC	CTTTATCTGC	CTTCACGGTA	60
CTGTCCTCTT	CCCCCAGCTC	CTCCCTGACC	CCATGGCCA	GGCTCAGAC	CTTCAGCTA	120
ACCGCTTCCC	ATGAGCCACT	ACTCTGATGT	CAGCCTATAA	CCAAAGGAGC	TGGGGGTCC	180
AGGCCTGGTG	ACCAACCTTT	CTCAGCCAC	TCAATCAGGG	TGCTCCCCAC	CTGCAGGCAG	240
GAGGCAACAC	CCTATCTGCT	ACCATCAGCC	CCTTCCAGAG	CCCATCTGCC	CCGCCAGCC	300
CTGCCCTGCC	CAGCCATACC	CTGCTCTGCC	CCATCTGGG	TGCCCCCTGCT	CAGGGATGGG	360
CTGGCAGGGC	TGTACCCAGC	CTCCCTGGTA	AGCAAAGAGC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

GGGATTGAAT	TCTAGACCTG	CCTCCCTGCT	TTCTAAATAA	TCTGACTAAC	CTTAGACATT	60
TTGTATCTTA	CTAAGAACAT	CCCTTCAATA	TCTACTTCAT	TATCCCATGC	CATTTCCCCA	120
CTGTCTCAAC	ACGAATCTCG	AG				142

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GAATTCCGGCC TTCATGGCCT ACTATGGTAT TGCTAACAA GGGTGGGAGG AGAGAGAGGT	60
AATCAGGGAG GACTTCCCAC AGGAGGTGGC ATCTGCAGAT GTCTCAAAA AGAAAAGAAT	120
TAGCCTGGCA AGAGGTGAGG ATTGTGTAGA GGTCACTCAC TTTCCTGTG GGTGGAGGAA	180
ACCATTCCAG GAGCTGTAGG AAGCTTGGTG CTGGTGAGG AGGCAGGAGA GGAGAGAAGA	240
GGAGATGACC TTAGAAATCA CATCCAAGAG CCTCTGATCC CAGGAGGCAG CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 254 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GCAGGAGAGA AAATTGAGGC TTAGGTTAACG AAACCTAACCC AAAGTCAAAC AATTAAATTG	60
GTTTGGGAAG ACCAGGAAGA CTTTAAGTTC CTAAGATCGT TTGAGATTCT GCATCAGGGA	120
ACACTTGACA GCAGGTTTAT ACAAAAGACAG ATTTGGTATC TTTGGAGGGA ATGAGTTCC	180
AGTCATTGCA GGTGGTCCAG CAGAGAGGGC CACTCTCCCT TTTTCTTTC TTTACTCCCT	240
TTTGATTCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

AGGCCATGAA GGCCCTTTC ATTCTTTTT GTTCCATCAC TCTTCTCTCA ACCTGTGTTT	60
CTTTTTTAC TGAGGAGTTA GTCCCCATTA GTTCTGTAT CACATTTCA TTGACACGAC	120
ATTACTCGCA GGTGGTGGGG AGCCTGGGCT TTTGGGAAAC CAGGCTGCTC TGGTCCCCAG	180
CATTGCCTCC TCCTAGCCCC TCTAGTCCAG TTGCTCTCCC TTACCTCAT TTCCAAACC	240
TCTTGTACCC TCCTCTCCCT CCCCCAGCTG GCCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GAATTCCGGCC	TTCATGGCCT	ATGCACTTCT	TCTTTCTCTC	CTCCTTTGC	TGGGTGCTTA	60
CCGAGGCC	CTG	GCAGTCCTAC	CTGGCTGTCA	TTGGGCGGAT	CGCGACCCGC	120
AGCGCTT	CCT	CTG	CTGGCTGGC	TGGGTCTGC	CTGCCCTGGT	180
TTACCCGAA	CAC	GAAAGGATAC	GGTACATCCA	GCTACTGCTG	GCTCTCCCTG	240
TGCTCTACGC	CTT	GTGGG	CCTGCAGCCG	TCATTGTCCT	GGTGAAATG	300
TCATCGTCTT	CAG	CAGCTCG	AG	CTCATCGAA		322

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GCCAAATCA	AGCAAAGTAT	GAAGAAAGAT	AAAGAAGGGG	AAGAAAAGG	GAAGCGAAGA	60
GGATTCCCCA	GCATCCTGGG	ACCCCACGG	AGACCAANCC	GTCATGACAA	CAGTGCAATT	120
GGCAGAGCCA	TGGAACTACA	GAAGGCGCGC	CACCTAAGC	ACTTATCCAC	ACCCTCATCT	180
GTGAGTCCTG	AACCTCAGGA	CTCTGCCAAG	TTGCCCGAGA	GTGGGTAGC	AAATGAAGGA	240
ACAGACGCTG	GATACCTGCC	TGCCAATTCC	ATGTCCTCTG	TAGCTTCAGG	GGCCTCTTTT	300
TCCCAGGAAG	GAGGGAAAGA	GAATGATACA	GGATCAAANC	AAGTTGGAGA	AACATCAGCA	360
CCTGGAGACA	CCTTAGATGT	CACCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GACGGCTACA	CCATGGGCGG	GCTGCTGCGG	GCCGCCCGC	TGCCGCCGCT	GCTTCGCCG	60
CTGCTGCTTC	TGCTGGTTTC	GGGAGCGTTC	CTGGGTGCTC	GTGTGGCTGG	GTCTGATGAG	120
CCTGGCCCTAG	AGGGCCTCAC	CTCCACCTC	CTGCTAGACC	TCCTGCTGCC	CACTGGCTTG	180
GAGCCACTGG	ACTCAGAGGA	GCCTAGTGAG	ACCATGGCC	TGGGAGCTGG	GCTGGGAGCC	240
CCTGGCTCAG	GCTTCCCCAG	CGAAGAGAAAT	GAAGACTCTC	GGATTCTGCA	GCCACCAACCA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

GAATTGGCC TTCATGGCCT ACCCTCTCAC	GCCACCCCG CCCCCACCGG GCTGCAGGTG	60
CTGCTGATGC GCTGGGATCT GATTGAGGAT	AAAAAGGAAG GAGAGATGAC CCCTAACCCC	120
TCATCCCCA GTTTGAAA GGTCTAAGCA	AGTGAGTCTG GTGGAGGAGC TGAGGGAGGG	180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG	CGGGGGCAGC TGTGGGCCGT GGCTTGGGCT	240
GGTCAGAGTG CGCTGAGCTG CCCGGCCCT	GCCCTGCCCA AGTGACCAGG GAAGTGTGTG	300
TGTGTCCATG TGTATGCGTG GCTCGAG		327

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

GAATTGGCC TTCATGGCCT AGAGAAGGAG	CCAGCTGGGG CGAATCCAT CCGCTTGAAC	60
ACCAAAGAAG ACAAAATGG TGTCGGGAC	TTAGTGGGCC TGCTGGCTGT GAGAGACACC	120
CCGGACGAGG AGCCGGTGA	CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGAC	180
CAAGAACAG AGGAGTTGGA	TAATCCTGAG TTCTGGCCA TTGTGGCTA TACCGACCCG	240
TCGGACCCCT GGGCCGGAA GGAGAACCTCG	AG	272

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

GAATTGGCC TTCATGGCCT ATTCGGATC TATGTATCTG TACTCATACA	GCCTCATCGG	60
GCTAACAGC CTTCTTTCA GAACAGTAGA	TCACTCACT GGGTTTCAA GTGACTGTTT	120
ACCTTCAAG GCTGGTTTA TAGGTCTTGC	CTCACTGTAT CCAGCAATCC AAACCTTACC	180
CTATCCCAGT CAGGACTGCA	CACCTCATAT TGAAAAGACAT ACCTTGAAC CAGACTCCCC	240
AAACCTTACA AATATCCAC	CCTTGACTCC CGTTCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC	TACTGTTTG GCTGGCATCT	60
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GGATGGACTC CAGCATTG	TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAACGAGAT	120
ATCCAGGGC TGCTTCATGG	TGTTATGGAG CAATTGGCA TTGCCAGGC CCGAGTGGAA	180
TATCCAGCTC ACCAGGCCAT	GAATCTTGTC GGCCCCAGA GCATTGAAGG TCGAGCTCAT	240
GAAGGACTTC AGCATTGGG	TCCTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT	300
GGAGACAACA TTCTTAAGGA	CTTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAATCCC	360
TGTCTGTGTTG GAAAAACAGC	AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG	420
TTCACTCGAG AGTTCCAGTT	GCACCAGCAT CTCTTGATC CGGAAACACT CGAG	474

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

GAATTCCGGC TTCATGGCCT AATTTTTTTG TTGTTGTTTC	CTTTTTGTAT TTTACTGATA	60
TCACCAGGAT AGTTTACTCT CCTTCTAGCT	TTCTGCTTAC CGCACACTGG ATAACACACA	120
CATACACACC CACAAAAATG	CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC	180
ACCCCTCCCT CCTCTCTCTA	CTTCTCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG	240
ACACCTGGGC AGACCCGCCG	GCTCTCCCCC CACCCACCC CGTCCTCGAG	290

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GTTGATGTGG GGGGTAAGTG TGTGTGTGTG	CGTGTGCGTG TATGTGCACG TGTGTGTGT	60
GTGCGCCTGC ACACCGAGAG CCCACTCAT	CGTAGCAGAA AATCAAATGG CCCCCAAATCA	120
GAACATGGC GCAATGTGAGC ATGCCACTTA	TTGTGTGCT GTGACTGTTC AGAATGTACA	180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG	CTGCAACCCC TCCTCTGTCC AACACAGTCC	240
TCACTGGTGT CTTTTCTCT	TCAAATCTAC AGCATTCTG ATCTCTGCAA ACAATTAAAC	300
CCAAAACCAA GTTCTGGCTG	ACAAGGCTAC ATCTTGTTC TTGTGCGTGA TTAGCCTCGA	360
G		361

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GTTCCTAGACC TGCCTCGAGA TATGCCGGAA	GGTTGCATGG CTGGTCCCAG GGCCAGCACA	60
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GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTTAAGT TTATTTCTG TTTTATGAGT	120
GTTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC	180
CTGCCCTCCA GCCTCTCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG	240
CAGAGGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT	300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTT TAAACAAAAA TGCCCTCGTT	360
TGTAAACCCCT TAACGCTCGA G	381

(2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTGATTC	60
TTACACATTT AATGCTCACCA AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTTGCT	120
ACTGCTCTTT GAAATACAAC CAGTGTTCA GCCAGACTGT TTTCCCTGCTT CTGCTCCCT	180
TCTCCTCTC CCAGCACATC TGTGAATTCT TTGACTGGTT TACCACTCCC ACACTCCCTCC	240
CCAGCAATGC AGATCTTCTA CACCCCTTAG GATCTAACGT AAGTCTGCTT CCCAGATATC	300
CTCCCGAACCA GCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:563:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 472 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

GAATTGGGGC TTCATGGCCT ACTTTAATGA GATAGGAACG AGTATATTCA CCGTCTATGA	60
GGCCGGCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCCG	120
TGGCGTTCC TACTTCTATT TCATCACTCATTTCTCCTCGCTGGC TTGTTGAAGAA	180
CGTGTATTCTC GCTGTTATCA TTGAAACATT TGCAAGAACATC AGAGTACAGT TTCAACAAAT	240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCAAG CAGATGTTC ATGAAGATGC	300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAAG CCCCAGGGAC GCGCCCCAGC	360
CTGCTCCAG AAAATGATGC GGTCACTCGT TTTCACATG TTCATCTGAG GCATGGTGAC	420
CGTGGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAAACCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:564:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 411 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

GGCGCGATGT TCCCCCTTCG GGCCCTGTTG TTGGTCTGGG CGCTTCTAGG AGTGGCCGG	60
TCATGCCCGG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT	120
TACAAAGAGT TGCGTGAGGT GCCGGAAGGA CTGCCGCGCA ACGTGACGAC GCTTAGTCTG	180
TCCGCGAACCA AGATCACTGT GCTGCGGCGC GGGGCCTTCG CCGACGTACAC AGAGGTACAG	240
TGCGCTGTGCG TGCGGCACAA TGAGGTGCGC ACCGTGGAGC CAGGGCACT GGCGTGCTG	300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTCC GTGGAGCGAC	360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G	411

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTG TTGAGATAAC	60
ATTAATTAAG CTTTTTGCAG TTTTTCTAG GACCAGATTA AACAGAAGTT TTCCTTTACA	120
GTATTCAATTA TGTTGGTAT CTCCAGAGTT CATCCTTTT TTGTGGTACT GGGAAAAGTT	180
GCACACATTA CCTTGCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAACCA	240
ACACAGAGCC AAAGACAAAA ACCACTCGAG	270

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GTTCCCTGTTG ACTAACGGCT CATCTTTCC TTGTTTTGT TTTTTTTTG TTCTTTTTT	60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTAAAT AACTATTATG ATCAAGGATA	120
TGCAAATTAC AATAGTGCCT ATGGTGTGA TCAAAACTAT AGTGGCTATG GCGGATATGA	180
TTATACTGGG TATAACTATGG GGAACATGG ATATGGACAG GGATATGCAG ACTACAGTGG	240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGTTCTTTT GGATTAGATT ATATAAAATC	60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT	120
GTCCTTCACA CTAGCTACAT GATTATAGT CTTGCTCCC AATATGTTAT GTATGGAAGC	180

CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCCTT	240
TCTGTGCCAA AGAGATGTGA TGCGAAGACT CCTGAAGATC AGTGTACTGT TACCCGGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTGGC CACAGTCGG GACCTATGGT AGAAAATAC TCAGTAGCTA CCCAGATTGT	60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTC CAGAAAGTTG GAAAACCTGC	120
AGCAACTGCA GTAGGTGGT GCTTCTCTCT CTTCAAGATT GCTAGTCATA GTGGCTATGT	180
GCAGATTGAC TTGAAAGAGAG TTGAAAAAGA TGTAATAAA GCAAAAGAC AGATTAAGAA	240
ACGAGCTCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACACA AGATGCTCAA GGTGTCAAGCC GTACTGTGTG TGTGTGCAGC	60
CGCTTGTC AGTCAGTC TCGCAGCTGC CGCGCCGGT GCTGCAGCCG GGGGGCGGTG	120
GGACGGCGGT NATTCTGG ATGATAAAC AATGGCTCACC ACAACTCTC AGTATGACAA	180
GGAAGTCGGA CAGTGGAAACA AATTCCGAGA CAGATGATTGTT TCCTGCACCTT GGACTCCAGG	240
AAAACCCCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG	300
TCGCCATAAA GTATGCATTG CTCAGAGATT TCAGACTGCA GTCTGCATTA GTCACCGGAG	360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT	420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGGCT GTTTGTGGTT CAGATGGTCA	480
TACCTACTCT TTTCAGTGCA AACAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT	540
CGAG	544

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCTA CATTAAAGAA AAGCTTCCA CACATCCATT TGAAGCTGAT	60
CTCCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA	120

GAGTCCAAA CTTCTGAACA CGAACTCTT CTAGACACCA AGATATTGA AAAAGACCAA	180
GGAAGTACAT ACAGTGGTGA TCTTGAATCA GAGGCAGTAT CTACTCCACA TAGCTGGAG	240
GAAGAGCTGA ATCACTATGC CTTAAAGTC AATGCTGTGC AAGAGGCTGA TTCAGAATTG	300
AAGCAGTTCT CAAAAGGGGA AACCCCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:571:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

GAATTGGCC TTCATGGCCT AAGGGAAAAC ATTTTGATG TGTAAGCTT CATGAAGTTC	60
TCTTTAAAAA ATACCAAGC TTGTTTATT CTGATAATTA ACCTAAGCCC TTATGAAAAT	120
AAACAAAATG AAGGGATTAT GACAGGTATT ACCAAAAACA CCAAAAGGAA CAAAGGGGCC	180
TGCGTTAAA CCTAATTGCT AATGCTTCAC AACTAGGAGA GCATGGGTC TTGATGTTA	240
AAAACCCAG GGTCTCCACC CTTCCTTGA TTGTGCAAT TCTGCTTCC ACAGTTCCGG	300
AGCTTACTCG AG	312

(2) INFORMATION FOR SEQ ID NO:572:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAAAATGTTG ATGGCCGCAG CAGGAGTAGA GGTCTGAGC CTCCCTATTT TCTGCATCTA	60
CTGGGGTCAA TATGCCACCG ATGGCATGG CAACGAGAGT GTGAAGATCT TGGCCAAGCT	120
GCTCTTCTCC TCCAGCTTCC TCATCTTCCCT GCTGATGCTT ATCCTCTGG GGAAGGGATT	180
CACGGTGACA CGGGGCGGCA TCAGCCACCC GGGCTCCGTG AAGTTCTCTG TCTACATGAC	240
CCTGTACACG CTCACCCATG TTGTGCTGT CATCTACAG GCGGAATTCT TTGACCCAGG	300
CCAGGTACTG TACACGTATG AGTCGCCGGC CGGCTACGGG CTCATTGGAC TGCAGGTGGC	360
GGCCTACGTG TGGTTCTGCT ATGCTCTCGA	391

(2) INFORMATION FOR SEQ ID NO:573:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTGGCT TCATGGCCTA AAAAAAAACTC CAGAAAAAAA CAACAGCGCG GTGGTGGGGT	60
TTTGTAAATT TCGCCTTTTT TTTTTTTGTC ACAGCGCCACG AAATTCAAGC TGCCTTTAGC	120
TCCTGAGAAA TATCCAAAGT AATTGCAGAT TGCAGGAGACG CACAGCATTG GTTCAAAAAA	180

GACCCGAGGC ATTGGGGCAG GGTTAGGTGG AGGGCACCGG AGGCTCTACA CAAGAAAAGC	240
AGGAACCTGC AAACCCACGT AGATTCAC TACAACCTTC CCTTTCTTC TGGCTAGCCA	300
TCCAGGGCTC TCCATGGCAC TGCAATGGCAC AAGTTGCTTC TGATAGTCTT TTAAGTTGC	360
TAAGGGAACT CCTCGAG	377

(2) INFORMATION FOR SEQ ID NO:574:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTGGGCC TTCATGGCCT ACAGCCTCAA GTCACTCCC AGCCCCCTCC TTGTCTGTGC	60
ATCCGGGGC AGCTCTGGAG GGGTTTGCT GGGGAACCTGG CGCCATCGCC GGGACTCCAG	120
AACCGCAGAA GCCTCCCCAG CTCACCCCTG GAGGACGGC GGCTCTCTAT AGCACCCAGG	180
CTCACGTGGG AACCCCCCTC CCACCCCTCGC GAGTCTGTTT CCAAGGAGGA GAAGGGAGCAG	240
AACTATGACT TAACTGAAGT CTCAAGAGAGC ATGAAAGCTT TCATATCCAA AGTCTCAACC	300
CACAAGGGAG CAGAGCTGCC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:575:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 438 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

GAATTGGGCC TTCATGGCCT ACTCAGCCTC CCTAATAGCT GGGATTACAA GCGTGAGCCA	60
CCACACCCCG CTGGAAATA TCTTAAAGA ATCAAATAA GAAAGTTACT CTACTTAAAT	120
CGTGTGCTTT TTCTGTGTGT GATTTATGGT AATCTTACCA TGGGGTATCT GATTACTTTA	180
GAAAGATCCA TTTAGCTTAT TTTTTCTTC TTTGGGTAT TTTTTCTTC CTTCCATTG	240
CACAGCTCC CCCAAATAA AAAATAAGA TATAAAGCT ATCTTCTCCC TCTTGTCACT	300
TTAAGTAAAA AGAACCTTTG CTTCCATTAA AATAATAGAA TTTGTGTGTA TATAATATAG	360
GCAGTGATTG GGCTCTCAAGC TGAGTTAGA TTTGAAAGA TGAGAATATT AAAGCTTGTC	420
AGCCAGCCCA CTCTCGAG	438

(2) INFORMATION FOR SEQ ID NO:576:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 510 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

GAATTGGGCC TTCATGGCCT ACTGTNTTCC ATAAAGGCTG TACTAATTTC CATTCTCACC	60
AACAGTTCAC TAGGTTCCC TTTCTCCAC ATTGTGCCA ACATTCTTA TCTTGTGTTT	120

NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTTC	180
ATTTCCCTAA CGGTTGGTGA TACTGAGCAT TTTTGATAC ACCGGGTCA TTGTTCTTTG	240
TGTTGACTT GAGTCCCTTA TATACTTGG ATACTGCTGT GGCGTGAATG TTTGTTGCCCC	300
CAAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTAGGAG AGCGATTAGG	360
TCCCTGAGGAC TCTGCCCTCT TGCTAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG	420
CTCTTTGCC CCTCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA	480
AGCCCCCCTC ACCAGACACT GTATCTCGAG	510

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

GAATTTCGGCC TTCATGGCCT AAAAATATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA	60
CAGAGGTATT TCTTGGGAAT AAAAGAAGGA ATATAGTCAT TCTTGGTAT TCTCTTGGT	120
GTCCAGAGTT ACTTAAAAT TCTTGGTGT TATTGCCCTT TAGTCACAGG GATAACACCTT	180
TTATTCAATT ATTATTTAT TTACCAAGTCT CATTTAGCAG TAGGAATGCA TCTTAGCATT	240
TTTATACTGC TGCTAACAC AGTGCTTCA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

GAATTTCGGCC TTCATGGCCT AAATCCTTC AGATGTCTG TGAAATGTT TGAATGCTAC	60
TTGTCTAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTTATTTT GCAACCAGAA	120
TGCTCTAGTT CTACAGATAG CCCTGTCCTGG TATACGTCTA CTTCACTGGA CCGAACACCC	180
TTGGAAAATA TGCTTGTACG GGTTCTCTA GTAAAAGATA TTTATGATAA AGACAATTAT	240
GAACCTGGAGG AAGACACTCG AG	262

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

GAATTTCGGCC TTCATGGCCT AATTTAGGAC CATTAAAGAG AGTTTGACTA AGAAAGAGCT	60
GTTTGAAACC TCCTGGCTTA TGTATTTTA GGGGTGTTGATCGAGGCT TTCTCCCTTG	120
AGTAGAGTTT GTGCATTTGC AGTATAAGAT TATCATTATC AAACATTCCCT ACTAGGCCTT	180

TCTCCTCAGC CCCTAAAAAA ATATGTATAG TAATGAAGTA GGAAGATCAT GTTTATATT	240
GACTTCACAA ATTCCCTCAGG CTAAGTTGCT TTCTACTGGG GTGTGGCTGG AGACAAAAT	300
TACAGGTAAG ACTTGACTTA ATTTTGATA GGGAGGTCT TAAGAGGCTT TTTCGGAATC	360
ACTCACCTCG CCCACTCCA TGCAGGGATG TGCTGAGAGC CCTTCAGTCT ACTTAGGAAA	420
ACCTGGCACA TGACTCGAG	439

(2) INFORMATION FOR SEQ ID NO:580:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTGGGCC TTCATGGCCT AGATATTCTC AGGGTCATCA AGACTCCTGA GATAGCAAAC	60
TTGGCCTTGC TTGGCTTGG AGATATCTT GCCCTGCTGT TTGACAACCG CTACTGTAC	120
ATCATGGACT TCGGGACAGA GAGCCTGATT AGTCGCTGGC CTCTGCCAGA GTACAGGAAA	180
TCAAAGAGAG GCTCAAGCTT CCTGGCAGGC GAAGCATCCT GGCTGAATGG ACTGGATGGG	240
CACAAATGACA CGGGCTTGGT CTTTGCCACC AGCATGCCTG ACCACAGTAT TCACCTGGTG	300
TTGTGGAAGG AGCACGGCTG ACACCATGAG CCACCAGCCG CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 740 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTGGGCC TTCATGGCCT AGACCTGCCT CGAGATTGCC ATCTTGGTT TGTTGGTTT	60
CGGCCGACTT CTTTGCCT TGCTATTTA TTTCTAGGT CTTTGTGCC CGTATTGTGT	120
GCTGAACCTC NGTCTCATCC TGTGACTAAG ATTGCCAAC CTCCCTGGAA TGCAGCCAG	180
TAGATCTCAG CCTTACTTTA CCTAACCCCTT TTTCAGATG GAGTCACTCT GGTTCAAACA	240
CCTCTGACAT TCGCAGTGGA ATCCATTAAAG AGATGTTAAG GAGATATGAT TATATTTCTA	300
AATTGTCACT CCAGCATCCC CTAGGCCAGA CATTATGCCA GTCTCTATCC ATACAGTATC	360
TCATTTAAC TCCTCGTCAT TAATCTCATT TTACCAATGA GTAAACATTGA AGCAAATGAG	420
TGACTTTCTC AAGGCTACTT ACTTACGCC TACCAAGGCC AGGATCAAAC CCTAGACTTG	480
TTCAAGGACA GAACACACAC TTAACCATCA CCCACTTAGG CCATGAAGGC CGGCCCTTCAT	540
GGCCTAAACT GCTGTTATTT TGATTATAT GGAGTTATGA AAATCTAAAT GTTTTACAAA	600
GTAAAGGAGT ATTCTTTTT TGCTCACTTA TAAACTAAAAA ATCACTAAAG TCATTCTGCT	660
AAACATGCCA CGAAGCCAAG CTTCTGCCA TATGTCTGCA TAATTCTTAAATCACTGCA	720
TATTGACGTG CAACCTCGAG	740

(2) INFORMATION FOR SEQ ID NO:582:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

GAATTGGCT	TTCATGGCT	ACAAAGGGT	AGCAAGGCAT	GTCTTACATG	GTGGCAGCAG	60
AGAGAGAG	CAGGGAAAC	TGTCATTAT	AAAACCATCA	GATCAGTTGG	TTTGTGCAA	120
TGGTGGAA	GAAAACCTCA	GGAAAGAGTC	ATAGACTGAG	CAGAGAAGAG	GACCAGCTAC	180
CTCCGTAGAG	GCAGGGAGAG	CAGCCAAGCT	GGAGCCTGAG	CAGCATTGCT	GGACATGGAG	240
AAGGCTGGA	ATCTTGCTAA	GGAAAGCAAC	AAAGGCTTTC	TTTCTATTCA	ATGAAGTCCA	300
CTCCCAGGAC	CTTGGGCAGC	GGACTGGGCC	ACCTGGCAGC	GTCACATCAA	360	
CTGGCAGCTA	AAAGTCTGG	AGAATGACAA	CTTCCAGGAC	GACCCCCATG	TGGGACTCCC	420
TCAGCTCAGC	AAGAGACTGC	CACAGTTCGA	TGATGATGCA	GACACCAGAC	AGTAAAAGAA	480
GAAAACCTGA	G					491

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

GAATTGGCC	AAAGAGGCCT	AAACAGTCCA	GAGAGGCATA	AATCAGACCC	AGTTCTTAGC	60
TGGCTTGCTC	TTATCAAGTA	AATGGAAAAG	GGGCCAGGCC	AAAGCAGGGC	AAGATGACCT	120
TGGACTTGGG	AGAGACTTGG	ACTCATGCCA	CAATCCTAGG	GTGCCCACTG	GACCATTGCT	180
TTTCTGAGTT	TTGTAGTCAT	TCGGTGTCTG	AAGTAAGGTA	GATTGAAGTG	AGGCCATTGG	240
TTTCCATCTG	GACCCCTTCT	CTCCTGTTT	CTTTTTTCC	GCCTTGTCT	AGGGATGTT	300
AATAGCCCG	AAATGCAAGC	CCTCCTCCAG	CAGATCTCTG	AGAACCCCCA	GCTGATGAG	360
AATGTGATCT	CAGCACCCCTA	CATGCCAGCAG	ATGATGAGA	CGCTTGGCCA	GAACCCCGAC	420
TTTGCTGCTC	AGATGATGGT	GAATGTGCCG	CTCTTCGCGG	GGAACCCCCA	ACTGCAGGAG	480
CAGATCGCC	TGCAGCTCCC	AGTCTTCTG	CAGCAGATGC	AGAACCCAGA	GTCACTCTCC	540
ATCCTTACCA	ATCCCCATAC	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

GAATTGGCC	TTCATGGCT	AGTTGAAAAT	GATCATTACA	CAATATATTC	CTAACATAAA	60
ACTGACTAAA	CTTGAAACAG	CTCACTGTGT	GGAGAGGACC	ATTCCCTTT	TGCTCACCAG	120
AACTGGAGAT	TCTTCTGCC	GGCTCCGGCT	CACAGCTGCA	AATTATTC	AGGAATGGC	180
CTTGTAAAAA	GAAGTTAAGT	CTCTCCAAAT	TATTCCATCC	TACCTGGTGC	AGCCATTGAA	240
AGCAAACCT	TCAGTTCAC	TGGCAATGAG	TCAGATGGC	CTCCTGGCCC	GGCTGCTGAA	300
AGACCTGGGC	ACTGGCAGCT	CGGGCTTCAC	CATTGACAAAC	GTGATGAAGT	TTTCAGTGAG	360
TGCCCTGGAG	CATAGAGTGT	ATGAGGTCCC	CGAGACCCG	GTTGAAATT	TTTTGGACAT	420
GTACAGACAG	CACCAGGCTT	CCATCCTGGA	GTACCTCCT	CCAGACGACA	GCTAATCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:585:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC AAAGAGGCCT AATAAAGGTG TGAAAACCTC ATTCAATTCA ATCTTCAACA	60
CAAATTGTAG GTAGCCTGTT TTTTAAACAA TTATTCAAC AAATATTAG TCCAAGGCCAC	120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTAA CTATCTCTGA CACTATTCAAC	180
TATTCTTCCA CATTCTCTAT TATTTATACC TATGGTAAAA TTTGCCAGTT TGACCATACAA	240
ACTAATACTC ACAGGGACAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:586:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA	60
TTGGAATATT TAAGTATTG CATAAAAAT CAAATGGTAG TGTTTGTAA TCTCTACTGT	120

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 503 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

GAATTCGGCC AAAGAGGCCT ACTCGAGTCG GGTCTAGAAAT TCAATCGACG GTTTAGGAAA	60
AAGACAATTT AAGAGAAAGAA CTAAAGAAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA	120
CAATTAAACA GTTAAATCA AGAATAGAAAG AACTTAATAA AGAAGTTAAA GCTTCCAGAG	180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA	240
TGGCCCAACG GATGGAACAG GCCAACAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG	300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG	360
AGACACTTGA GAAAAAAACTT AGAGATGCAA ATAAGGAACT TGAGAAAAAC ACTAACAAAA	420
TTAACGAGCT TTCTCAGGAG AAAGGACGGT TGACCCAGCT GTATGAAACT AAGGAAGGCG	480
AAACGACTAG ACTCACTCTC GAG	503

(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 567 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

GGCACTATGG	TACCAAACC	TCAGTCTTCA	CATA GTCAAA	CTTGGACACA	AACAGCACCT	60
CCCACAAACA	TTCTTATCCT	CATCCCAGCA	TTGGTTACTG	ACCACACACT	CTAGCAGGTC	120
ACTCAAGCGC	TAATGCTGGG	AAGGACCTCT	GAATACTCT	CTTTGTCTTG	TGCCACACAG	180
CCAGGGTCA	CAAAGCCTGT	TAATGCTTAC	TCCAAAAAAAG	GCAAATCTGA	CCCCCTTCC	240
TCAAAACCCA	GCCACATACT	AAAGTCAAGG	ATTCACTCAC	AGGTCTGCCT	TAGTGCACTA	300
GCCCTATAAC	AGTAAACTAT	TCACTTCCCC	TCCAGTCCCT	TGCCCCCTTT	CAAGCAATT	360
CCTGTACTGC	CAAGGGAATT	ACTTTTCTAA	AATTAGCTAA	GAAACTTTTG	ATGGTATCTT	420
ACTGTCCCAA	AAATAAAATT	TAATTCCCTC	TTTAGCATGG	TATAAAAAGG	ACACAAACAGA	480
GTTGGTCTTA	GTGTCCCTTT	AAAGACACTA	GATTCTCAT	CACCATACCG	CATGTACCC	540
ATACGACTTA	TCAAATTCCCT	ACTCGAG				567

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

GAATT CGGCC	AAAGAGGCCT	AGGCATGGTG	AGTTTTGATC	TTCTTCCCT	TCTTTCTTC	60
CCCTTCTCT	TTCCCTCTTT	GATCTTCTTC	CCCTTCTTT	CTTCCCTTC	CCCTTCTTT	120
CAATTCTCC	CACGTCAA					138

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

GAATT CGGCC	AAAGAGGCCT	AGAGAGAAATG	AAAAAGATAA	GGAACAGAAA	CAAACAAATA	60
CCGATAAAGA	AAAAAATAAA	AGAGAAAGGG	AGCTTCTCTG	ACACAGGCTT	GGGTGATGGA	120
AAAATGAAAT	CTGATTCTTT	TGCTCCAAA	ACTGATTCTG	AGAAGCCTTT	TGGGGGCAGT	180
CAGTCTCCC	AAAGGTATAA	GCTCCGAGAT	GACTTGAGA	AGAAGATGGC	TGACTTCCAC	240
AAGGAGGAGA	TGGATGATCA	AGATAAGGAC	AAAGCTAAGG	GAAGAAAGGA	ATCTGAGTTT	300
GATGATGAAC	CCAAATTAT	GTCTAAAGTC	ATAGGTGCAA	ACAAAACCA	GGAGGAGGAG	360
AAGTCAGGCA	AATGGGAGGG	CCTGGTATAT	GCACCTCCAG	GAAAGGAAAA	ACCGAGGCAG	420

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

GAATTGGGCC	AAAGAGGCCT	ACATTGCTT	TCAAATAACT	AAAATAACA	CGTTATGTGC	60
CATGTGGCTA	CTTTAGTAAT	ATTGCCAAGA	AGAGCACAGT	TTTACACTA	GTGGCATCTC	120
AGTGAAATTA	ACCAAAGATG	AAGCTTGGC	TTTGCTGGT	AGATCAGAGC	CCTCCGTAGC	180
AGGCAGCGCC	ACTCCAGGGT	TCAGACAGGG	CTGCACAGGC	GGCAGAGATA	CAGGGCTGTGA	240
GGGCTGAGAC	GCCATGGGGC	CGCTGCTGCT	TATGTGGTTG	GATTGTTAC	AAGCCTCATT	300
ATTTAAACTG	AAGGCATTT	TTTTTTCTG	CTGCCTTCC	CAAAGTGGTT	AGGTTGGAA	360
AAGAGATGAT	GATGGATAA	TTTATTCTG	CTTTTAAGC	CATTTCCTCCA	AATGGGACTA	420
GCATGCTTGT	TTTCAGTATA	CCGTGGCTG	CCTCATGATG	GTTTGAGAT	ACTGTCGTG	480
GATGTGAGGT	GGGGACTTC	TTCAATTGTC	TATTTCTATC	TNCACTTTGT	GCCTGGAGAG	540
CTTTCAAGGGG	AGGTGGAGGA	GGAGGGCTG	CCAAGCTACT	GCAACATCTG	TCACCCACTA	600
NACCCAGACC T						611

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

GAATTGGGCC	AAAGAGGCCT	AATTGAATTC	TAGACCTGCC	TGAACACCTGT	CCCTCTTAGG	60
AAATTGAATA	GCTTGAGTTA	CGAAGGAAC	GCATGGAC	GACTGAGTTT	TGTTCCCTCTC	120
TTCCCTGGAA	GCTGGATGTC	CTTTACAGCT	TTGCCAGTA	TGTCATGTGG	CCCCCTGAAGT	180
ACATAATCCA	GAGTEGACTG	CCTTCAGGG	TCCCTCAGCT	GTTGAAGTGG	AGCATTCATA	240
TCAAGACTAC	ATCTTTCCTG	TTCAAGCTTTC	TTCAGCCTTG	GAGGAACAC	ACACAATGGA	300
TCCAAGACTT	CTGTCCTTG	CTAATTATCT	ATAAGAAGTA	AAACCATTT	ACATAACTTG	360
TGAATATGTT	TTCTTTCACT	GGATTTGGC	AAATAGGTAC	CCAGTCATG	GTGGACCTAC	420
ACAGTTAGGC	CTCTTGGCC	GAA				443

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

GAATTGGGCC	AAAGAGGCCT	AAAAGCATTC	AGTATTGGTA	AAATGAGTAC	AGCTAACGGA	60
ACTTTAAGTN	AAAAGGGACA	GGAGAAGATTA	AAGAAAAAGG	AGGATGAAA	GGCAGCTGCT	120
GAGATTTATG	AGGAGTTCT	TGCTGCTTT	GAAGGAAGTG	ATGGTAATAA	AGTGAAACAA	180
TTTGTGCGAG	GGGGTGTGTTG	TAATGCAGCT	AAAGAAGAAC	ATGAAACAGA	TGAAAAAAGA	240
GGTAAAATCT	ATAAGCCATC	TTCAAGATG	GCAGATCAA	AAAATCCTCC	AAATCAGTCT	300
TCCAATGAAA	GACCACCATC	TCTTCTTG	ATAGAAACCA	AAAACCTCC	ACTTAAAAAA	360
GGAGAGAAAG	AAAAGAAAAA	AAGCAATTG	GAACTCTTCA	AAGAAGAATT	AAAGCAAATT	420
CAAGAGGAAC	GTCGACTCGA	G				441

(2) INFORMATION FOR SEQ ID NO:594:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 562 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

GAATTCCGGCC	AAAGAGGCCT	AAAGAAAACCT	AGCTAATAAA	GAAAAAGCTG	TTGCTCAAAT	60
GAAGATAATG	ATCTCAGAGT	GTGAATCATC	TGTGAACCG	CTGAAAGAAA	CATTGGTTAA	120
TCGAGATCGT	GAGATAAAC	GCCTCCGGCG	CCAGCTTGAT	GCAGCTCAC	AAGAACTCGA	180
TGAAGTAGGA	AGATCTAGAG	AAATCGTTT	TAAGGAAAAC	AGAAAGACTGC	AAGATGACCT	240
GGCTACAATG	GCAAGAGAAA	ATCAAGAAAT	CTCATTGGAA	TTGGAAGCAG	CAGTGCAAGA	300
AAAAGAAGAA	ATGAAGAGCA	GAGTTCATAA	ATACATAACA	GAGGTGTAC	GATGGGAGAG	360
CTTAATGGCT	GCCAAGGAAA	AAGAAAATCA	AGATTGTTA	GATAGATTTC	AGATGTTCA	420
TAACCGTGCT	GAAGACTGGG	AGGTCAAAGC	CCATCAAGCT	GAGGGAGAAA	GCAGCTCAGT	480
TCGACTGAA	CTTCTTTCTA	TTGACACTGA	GAGGAGACAT	CTTCGGAAA	GAGTGGAGCT	540
ATTAGAAAAA	GAAAATCTCG	AG				562

(2) INFORMATION FOR SEQ ID NO:595:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

GGAAAGAGCAG	AAATTGGTGG	CTTATCCTCA	TGATGGAAAA	ATCTTTTCT	GCACCTCAC	60
AGATATCCCT	CCTGAAAATG	AACTGCTTTT	TTATTATAGC	CGAGATTATG	CTCAACAGAT	120
TGGTGTTCCT	GAACACCCAG	ATGTGCATCT	CTGTAACGT	GGCAAGGGAGT	GCAATTCTTA	180
CACAGAGTTC	AAAGCCCAC	TGACCAAGCCA	CATCCATAC	CATCTTCTA	CCCAGGGACA	240
TAGCGGCAGC	CATGGGCCAA	GTCACAGCAA	AGAAAGGAAG	TGGAAGTGCT	CAATGTGCC	300
CCAAAGCTTT	ATCTCTCCCT	CCAAACTCA	TGTCCACTTT	ATGGGTACA	TGGGTATGAA	360
CCCCCACAAG	TGTGATTCT	GTAGCAAGGC	TTTTAGTGT	CCCAGCAACC	TGCGAACCCA	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:596:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

GAAAAATCAG	TCGACTGAAT	GACACCATCA	AATCTTGAA	ACAACAGAAG	AAACAAGTGG	60
AACATCAGCT	GGAAAGAAGAA	AAGAAAGCAA	ACAATGAGAA	ACAGAAAGCT	GAAAGGGAGC	120
TAGAGGGTCA	AATCCAGAGA	TTGAACACAG	AGAAAAGAAA	ACTAAATACG	GACCTGTATC	180

ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCGCCTGC	240
AACGTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC	300
AGAAGAAGAA GCCGGATGGG TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAGAAGTGCAGAGAGGGCCA GTGTTGTTGT TACCTGAAAG GTAAGTGCAG CCCACAAAAA	60
TGCACTGAAG AAGAAAGATAT ATGCAATGTTAAGTTAAT ACAATTGAGA TACATTAGC	120
AGACAGAACATC AATAGAGTTG ATGAGTGA GACTGGATGT GTGGGGAGTT TATATCACTC	180
CCAGGTTTTT GACTTGGGCC ACCGGGCACT CAAGAAGGAA AAAGAGGATC CAGGGAGAGG	240
AACTTTCTG AGGACTGGGG TAGGGCTGAA CAGCTGCATT CGAGACTGGT GGAGGGTGGG	300
CTGGGCATGG GATGCACAAA TGGAATTCC ACTGGGTCTG CAGCTCACAC ATAGGCATGA	360
CCACGCATAGA GATAGAGAGG CCCCACTGCT GCTGAGTAAC TGTGATTCCC CAGGTGATGG	420
CATCAGCTGA GAAGGGAAAGG AAGCCCCATGT GAGGACACTG AAGAAGGAGT GAGCAGACAA	480
TAAGAAGCCC ACAGAACAGACA GAGAAGGAAAC AACTAGAAGG AGGCTCGAG	529

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAAAAAGATG AAATCTGATG GATTAGGAGC ATCTGGACAT TCGTCAAGTA CCAATAGAAA	60
TAGTATAAAAT AAAACTCTGA AGCAAGATGA TGTAAGGAA AAAGATGGTA CAAAAATAGC	120
ATCTAAGATT ACAAAAGAAC TTAAAATCTGG GGGAAAAAAT GTTTCCTGGAA AGCCAAAAC	180
TGTAACAAAAA TCCAAAACAC AAAATGGTGA TAAGGCACGG TTGGAAAACA TGTCACCTAG	240
ACAACCTGTA GAAAGATCAG CAACAGCAGC AGCAGCAGCA ACTGGACAGA AGAATTACT	300
AAATGGAAAAA GGAGTGAGAA ATCAGGAAGG GCAAATTCA GGTGCCAGAC CCAAGGTACT	360
CACAGGAAAC TTAAATGTGC AAGGCCAACG AAAGCCCTTG AAGAAAGCTA CAGGGAAAGGA	420
CTCACCATGC CTCAGCATCG CAGAACCCCT CGAG	454

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

GAATTCTGGCC	TTCATGGCCT	AGGTCTCAA	GCATTGCTTC	AATATCAATA	TCGTCTGCCA	60
TTTCTCTAA	ACGCCTGTC	CGGCCTTCGG	GCGCCTGTT	TGCTCGTGT	CGGGAAAGAGA	120
TTGCTGCTGC	TGCTGCTGCT	GCTGCCCG	CGGCCGCTTC	TGTTGCTACT	GTTAAGCCCC	180
TAGAGCCAGG	CCCGGAAAC	GCCCAGCCG	AATATCGGT	TCCAAGGACG	GCTAGGCCCC	240
AGAGAAATCTA	AAAAAAACAA	TGGAATTAGA	GAAGCCCCAG	CGGGAGAGCA	GGACGGCGGC	300
TTCGGCAGCT	CAGGATCCAC	CCNGCGACA	GCGTCGACAA	GTTCCCTGAA	ATGGCGGCCG	360
CTGCTTCCCT	GTACTCANAN	TCCACCCCCC	GAATTCTAGA	CCTGCTCGA	G	411

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

GAATTCTGGCC	TTCATGGCCT	AATTAAGCCT	GCCTACTTCT	ACAATGCATT	CTGTTACCTA	60
TTTGAACAGT	ATGTTTGAA	CTATGGCAAT	GAAGTCAGTA	GATAGGAAAC	CAGTTATTCC	120
TTCTACCTTT	AAAATTTTG	AGAACATTGCC	AACCAGGGAC	TAAAGCTATT	ATCTTGAACA	180
GAGTCCCTAA	AGCTAGTCTA	GTTCCTGCCA	CATCTGCAAT	GATTATTGTT	TAATTTCAAA	240
AGAATCCCTA	GGCTCTACAA	TCTAGGGGTG	GTAAATGTGT	TTCCACTATA	CTTGGGACCG	300
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GAATTCTGGCC	TTCATGGCCT	AGGAATCTCC	TCTTAAACCA	GGTGAAGTGG	GAAAGCAGGG	60
ACCATACAC	CCTGAGGTGAC	ATCTACCTGA	ATAATACTAT	TCTCTGATT	GTACAAGTCA	120
GCGAGGACTC	AGGAAGACTC	TTTAAAAAGA	GTAAAGAAGT	CGGCCAGCAG	CTCCAAGATG	180
ATTTGATGAA	GGTCTGAA	GAGCTCTACT	CGGTCTGAA	GACATATCAC	ATGTACAATG	240
CGGACAGCAT	CACTGCTCAC	AGCAAACCTAA	AGGAGGGCGA	GAAGCAGGAG	GAGAAGCAA	300
TTGGTAAATC	GGTAAAGCAG	GAGGACCGGC	AGACCCATG	CTCCCTGAC	TCCACGGCCA	360
AGGTTCTGAT	TGAGGAGAAA	CATGTCCGGA	GGAGCTCACT	GAAGAAGATT	GAGAAGATGA	420
AGGAGAAAGCA	CCAAGCCCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GAATTCCGGCT TCATGGCCTA CAACATGTCA	60
TTTCTNGCTT TCTCTTCTCC TGGTTCCAG CCTCTACTCA	120
ATAGTCCCCC CAGCTTTGTG	180
TGCTGGTCTC GGGGCTTCAT GGAGATGAAT GGGCGGGGG AGTTGGTGA GTCACTCAAG	240
AGATTCTGTG CTTCCACGAG GCTTCCCCCC ACTCCTCTGC TGCTATTCCC TGAGGAAGAG	300
GCCACCAATG GCCGGGAGGG GCTCTTGCGC TTCAAGTCT GCCTTACCTT TATCCAAGAT	360
GTGGTACAAC CTCTTACCTC GCAAGTTCAAG AGACCCCTGG TCTCTGTGAC GGTGTCAGAT	420
GCTTCTGGG TCTCAGAACT GCTGTGTC A CTTCACCGT GTATCAAGTA	480
AGTGGCTTC GTCTGTTCA TCGCCAACTA GGGGAAGCGA ATGAGGAGTT TGCACCTCGT	540
GTACAACAGC TGGTGGCCAA GGAATTGGGC CAGACAGGG A CACGGCTCAC TCCAGCTGAC	585
AAACAGAGC ACATGAAGCG ACAAAGACAC CCCACACATC TCGAG	

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCCGGCC TTCATGGCCT AGTCTGGTAG TAAGGTGGAG TGGGTTGGG GCTAGGTTTA	60
GCTCGGGGGA GGTGGTGTG GGGGCCGAG GCTGCGCGT GCCTGGGTAC ATCTCCAGGC	120
CCACGCCCCG GGCTTGGGAA GTCACATCCA TGTCTCTGG CGTGCAGCT TTCAAGATT	180
GCGAAAGGC TCCCAGAGCT CTGTTTAAA TGGTGAATCC ATCTTAGAA AGAACGCTGA	240
TTCTCTTGA AGTGAGCCTG GCATTTGTCA GACAGGAAC TCCCAGGGAG GAGCACCTGT	300
GTTGGTTGG GTGGGTTTG TTAACTGCAG AGAGTGGGAA GAACAGATGC TCCTCACACC	360
GTCCTCGAG	368

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCCGGCC TTCATGGCCT AGGAAAGACC ATCAGCCTGG GAGTCAGTGA ACCTGACTCT	60
GATCCCAGCT CTGCCCTCAN TCAGCTGTGATGACAGGT AGGTACCTT CCCTCTCTGA	120
GCCACAGTTT ATCTGCTGT AAACAGGGT ATTGGACTGG ATTCTCTGTT ATCTCTCATG	180
TCTCTGTGAA AGGTCTGTGTT TCTCAAATAC TCCCTAGGGA CATGACCTCA CATAGAAAGA	240
GGGGGTGCCA CGAACTGGAT TCCCAGCACT CCCCTCTCCC AGCTCTGCTC AAGCTGAGGG	300
ACCTTGGAAC ATGGTACTTG GACCTAAGTA CTCTCTCTGG GCTTCAGTGT CCCCACTAT	360
AAAATGGGGG AAATGCCAA CTCAGGAGGT TGAGGTAAGG ACAAAAGGAA TTAATACATG	420
GAAAGTGCCT GGAACAGTGC CTGGCACAGT CTGCTTCAAG AAAAAGCTGC AAGGTGGCTA	480
CTCTCAGCAG ATATAAGTTA ATGCAGGAAC AGCAACTAGC AGCTCTTGA CATGCAATAT	540
ATTATATATT TTTGCATCT TTTACCCCTTC ACGGCACTGA GCCTCACAAAT CGTTGACCT	600
CGAG	604

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GCGCAGCCAG CGCCTGCCTC CGACTCGACT CCACACCTGC TTGCTACAGC GGGTGAGGAA	60
GCAGGAAAGG GGGAGGGAGG GATGTCGCTC GGATTCTGT AATAATTGT TTCAATTGTTT	120
CCAATCGACT TAGTCACCAAG GTTAAATAGT AGCATAGACC TTTCAAAAAA GTAGCTAGCT	180
TATAAGTAGA TGTATTGAAA ACACCTGCTT GTTGAGCTGT AGACATTCC TCATTACTG	240
TGTGAACCTCT AGGGGGGTGAA ACACGGGCGG AGAGCGCTG TGAGCTCAAG CGGCTCCATC	300
CCCACAGCGG CCCAGGGCTA CTCGGGGCTA TTAAATCAGGC CGCAGAGCTG CCCTCTGAGC	360
CGGGCCGCCA CGGCCAACAG AGGGCTCCCT GGGCGGGATG TTTAAATCG	420
CACAGGGACA AAGGAAAGGA AAGACGCTGG GGCCCAAGCC CGAGCTTATG AACGTTATC	480
AAGGAGCGAC TCGAG	495

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCCGCT TCATGGCCTA GACTTCCAAG GACATGCTTC GAACTCTGGC CCAAGCCAAG	60
AAGGAATGCT GGGATCGTT CCTCCAGGAG AAGTTAGCTT CAGAGTTCTT TGTGGATGGA	120
CTTGATTCTG ATGAGAGGTG ACTACAATTG CAAAGTAGAA TTTGCTTGA CACCTGATGC	180
CAGGACAATA GTATGTTACC ATCCTTCTAT AGACATTCCA TATGAACGCC CAAAACCTAT	240
CCCTTGACCA GATCCTGTGT ATAATAATGA AGAAACACAT GGTCAAGTGC TGAAAACTAG	300
AGAAGAAAAA AGTGAACACC TGGAGCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCCGCC TTCATGGCCT ACTGCCTCGG CCTCCCCAGT AGCTGGGACC ACAGACGCC	60
ACACCCATGC CCGGCTAAAT TTTTGATTT TTAGTAGAGA CGGGTTTCAC CGTGTAGCC	120
AGGGATGGTCT CGTTCTCCCG ACCTCGTGT ACCTCGTGT CGGCCCGCCT CGGCCCTCCA AAGTGTGGG	180
ATTACAGGCG TGAGCCAAT CGCCCGGCCA GGAATCCCTC CTCTGCTCTGA CCTAAGTGCC	240
CTCTGCCCTG GAGCTGCTCA GCCTCTATCA ATTTTCTGG CTCTCAGCGA ACGTTTCAT	300
TCAGTTGCAA GACACAGAAA CTCAAATTC AACCTGCTTA CACAAAATAG TGAATGTACT	360
GGCTCATGCA CTTTTAAAG AGATGAGGTC TGTGTGCTG CCCAGGCTGG ATGTGAACTC	420
CCGGGCCCAA GAAATTCTCC TGCCTCAGTC TCCGTAGTAG CTGGGACAC AGGAGCATGA	480
CTGTAAGTCC TGGTGTGAAT CAGGCTCCAG AAACAGCTTG ATCCTGGTTC CCAACAGTAT	540
GGTCAAAACT CATTCTCTCT TCTGTCTTCT TCTCTATGAC AGGTGCTCCC TAAGAAGTGA	600
CAAAGAAGGC CACTAACAGC TCTGGGCTCG AG	632

(2) INFORMATION FOR SEQ ID NO:608:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 531 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

GTATNGNTGA	AAATAAGAAA	AAATATTCT	GAAATTGGG	AACTTGAGAA	CATAGAAGAA	60
CACCAAGTCTG	TAGATATTGC	AACTTGGAA	GATGAAGCTC	AGGAAAATAA	AAGCAAAATG	120
AAAATGGTTG	AGGAACATAT	GGAGCAACAA	AAAGAAAATA	TGGAGCATCT	TAAAAGTCTG	180
AAAATAGAAG	CAGAAAATAA	GTATGATGCA	ATTAATTC	AAATTAAATCA	ACTATCGGAG	240
CTAGCAGACC	CACTTAAGGA	TGAATTAAC	CTTGCTGATT	CTGAAGTGG	TAACCAAAA	300
CGAGGGAAAC	GACATTATGA	AGAAAAACAA	AAAGAACACT	TGGATACCTT	AAATAAAAAG	360
AAACGAGAAC	TGGATATGAA	AGAGAAAGAA	CTAGAGGAGA	AAATGTCACA	AGCAAGACAA	420
ATCTGCCAG	AGCGTATAGA	AGTAGAAAAA	TCTGCATCAA	TTTGACAA	AGAAATTAAAT	480
CGATTAAGGC	AGAAGATACA	GGTAGAACAT	GCTAGTCAG	GAGACCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:609:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

GTGACTTTGG	AACCTTGAGA	GTTAGATGAA	TAAATCAGAA	AAATGGAATT	AAATGTATCT	60
ACTTTATTAT	TGGTAAATCT	GGTTAGGATG	TGCAGCCCTA	ATCAGGCTTC	CTTAATTCCCT	120
TCTCCACTGA	GTCTGGACCA	GCACACTCTCA	CTAGAACATT	CTATGATGAC	GGAAATCCTC	180
TGTGTCTGCG	CTGATCAGTG	TGGTAGTTAC	TGGCCACATG	TGGCTGTTGA	GTACTTGAAA	240
TGTGCCAGT	GTTGGTGTG	AATTGTGTT	TTAATCTTAT	TTAATTTAAA	TTAAATAGC	300
CAAATGTGGC	TAGTGGCTGT	TGTACTCGAG				330

(2) INFORMATION FOR SEQ ID NO:610:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GTGGAGGCTT	TCTTGATCAT	GGATGGTGA	GATATACCA	ATTTTCAAG	TTTAAAGGAG	60
GAAACTGCCT	ATTGGAGGA	ACTTTCCCTG	AAATATAAGC	AAAGCTTCCA	GGAGGCTCGG	120
GATGAGCTAG	TTGAATTCCA	GGAGGAAGC	AGAGAAATTG	AAGCAGAGTT	GGAGGCACAA	180
TTAGTACAGG	CTGAAACAAAG	AAATAGAGAC	TTGCAGGCTG	ATAACCAAG	ACTGAAATAT	240
GAAGTGGAGG	CATTAAGGA	GAAGCTAGAC	CATCAATATG	CACAGAGCTA	TAAGCAGGTC	300
TCAGTGTAG	AAGATGATT	AAGTCAGACT	CGGGCCGAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGGCC	TTCATGGCT	AAATGACCCAN	ATCGAGAGGG	AGGACTATGA	GGACTTTGAG	60
TACATTCCGC	GCCAGAACCA	ACCCAGGCCA	CCCCAAGCA	GAAGGAGGG	GCCCGAGCGG	120
GTCTGGCCAG	AGCCCCCTGA	GGAGAACGCC	CCGGCCCCAG	CCCCGGAAGA	GAGGATTGAG	180
CCTCCTGTGA	ACCTCTGCTG	CCCCCGCTGC	CCCCTGACTA	TGGTGTATGTT	TACCTGATCC	240
CCAACACTACG	TGACATGGAC	TATTACTTTG	GGCCTCTCC	GCCCCAGAAG	CCCGATGCTG	300
AGCGCCAGAC	GGACGAAGAG	AAGGAGGAGC	TGAAGAACCC	CAAAAAGGAG	GACAGCAGCC	360
CCAAGGAGGA	GACCGACAAG	TGGGAGTGG	AGAAGGGCAA	GGACCCACAA	GAGCCCCGAA	420
AGGGCGAGGA	GTTGGAGGG	GAGTGGACGC	CTACGGGAA	AGTCAAGTGT	CCCCCCATTG	480
GGATGGAGTC	ACACCGTATT	GAGGACAAACC	AGATCCGAGC	CTCCTCCATG	CTGGGCCACG	540
GCCTGGGGGC	ACAGCGCGGC	CGGCTCAACAA	TGCAGACCGG	TGCCACTGAG	GACGACTACT	600
ATGATGGTGC	GTGGTGTGCC	GAGGTCACTC	GAG			633

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

AAATACTAGA	GATAAAAGTAG	ATTCATGGCT	TGGTAAGGAA	ATTTTAAGCA	TTCCCTTCAAA	60
GATTGACGTG	CTAAAATAAG	CATTGATGTT	TTGAGTTTTT	TTACACCTAG	GATTTTTAGC	120
TTGGGTGTG	AGGTGAAGGC	CAAGACTCTC	TGCAGGAAAA	AGCTTATTTT	CAAACCTCAGA	180
AAATAAAATG	TCAATCATAA	AAATCTACTT	CAACTTTAGC	AAAAAGAAAA	AAAAAATCAA	240
CAAAAGATAT	ACTCTGTATG	CTGGGATTCC	GAGGTTCCAA	CACACTGTTA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GATCCAGTGC	TGCAGCTTCC	TTACTATGAA	ATGACAGCTC	CACTTCTAA	TAGTGCATCC	60
GTGTCTTCCT	CACTGAATCA	TGTTCCAGAT	CTTGAGGCTG	GACCCAGCTC	ATATAAATGG	120
ACTCACCAAC	AACCAAGTGA	CTCTGACCTT	TATCAGATGA	CAGCTCACT	TCCTAATAGT	180
GCATCCGTGT	CTTCTCTACT	GAATCATGTT	CCAGATCTG	AGGCTGGACC	CAGCTCATAT	240
ATAATGGACT	CGCCAACAAAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

GGTGGAAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTGAG AACTGGGCT	60
ACTGAAAGCC CTAACCCCCAC TTGGCTGCAT TTTATTTGGT AACCACTGAG GCAAACACCC	120
TTGCCAGACC CCTACCACATCC ATCTTGATGT GGTCCTGCA CTGGACACTG CTTGGGTACG	180
GGCCCTGCCCA GATCTTGGGA ATGTGGGAG TGGCTCTCT GAAGCACCAG TGGGCAGAGG	240
ATGAGTCATG GTATCCTCCC GGCACCCCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 521 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

GAATTCCGCC TTCATGGCCT AGTATTTTTG TAGAGACGGG GCTTCAGCAT ATTGCCAGG	60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCCTGCTC AGCCTCCCA AGTGTGGGA	120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG	180
ATTCTGGCTG TGGAAGACCC CAAGATTCTT TGGATTGTG ATGCTTTATT TAATTAGAG	240
ATTATCTTCT CTGTCCCCACT CTTCCCCCTTC CTAAAAAGGA CTAGATGCTT GCTGCTTAAT	300
TAGTAAAGCA AATTAAAGAT AATTCTGTC TTTGAGATTT AGGGATAGAT TTTTAACAT	360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAA TTAGGAAACT TGAACTTTA	420
TTTGCACAGA CTGAGAATTA TGACTGAGGA AAAGTTAGAG GATCAGAAAA AATAAATTAA	480
TAAATCACAA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G	521

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 577 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

GAATTCCGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAATTCTG GCCCCATGA	60
CTGCCCTTC CCCTCACACC CCCGGGTTG CTCCAATGGT TATGTCACGT TGCTGGCAA	120
AAGGGACTTT GTAGATGTCA TAAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT	180
GGATTATCCA AGGGGCCAG TGAAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG	240
CCGCGCAGGA GGCCTGGGT CGCTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCTCC	300
AGCATGGAGC TCGGGAGAGC CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA	360
CGGGGCTCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTG AAAGTCCGTC	420

ATTTCTGGTA ATTTGCTATA TAAAACATT GCTATAGAT TAAAAACTAA TACAGAAGAA	480
TATTTCTTTA ACATTATGTT AAAAGGAAA AAAGCTAACAA TTTTCTTTAT AGCAAAACAC	540
TGCCATGATT TACATTAAA TTAGGAACAT ACTCGAG	577

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCCGCC TTCATGGCCT AGCACATACA GTATAAAAAA TAATCACCCA CCATAATTAT	60
ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTCAA TACAATTTTT TCCGTATAAA	120
AATACTGGGA AAAATTGATA AATAACAGGT AAGAGAAAAGA TATTCTAGG CAATTACTAG	180
GATCATTTGG AAAAAGTGGAG TACTGTGGAT ATTAAAATA TCACAGTAAC AAGATCATGC	240
TTGTTCTAC AGTATTGCGG GCCCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCCGCC TTCATGGATT CTGCTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA	60
ATGTGGGACA GTGCTTCTC AGAACAAAC ACCCTTGAG GCTACAACTG ACGAGGAAGA	120
TTCTGTTCG AATATAGCCA CAGAAATAAA GGATGGGAA AAATCTGGGA CAGTGTCTTC	180
TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTT TGAATATAGC	240
CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAAGCCTT	300
GAAGGCTACA ACTGACGAGG AAGATTCTGT TTGATTATA GCCACAGAAA TAAAGGACGG	360
AGAAAATCT GGGACAGTGT CTTCTCGAA AAAACCGGCC TTGAAGGCTA CAAGTGATGA	420
GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAGGAT GGACTCGAG	469

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCCGCC TTCATGGCCT AGTCCGTGTT GTGGTCACTG TGTGAACCTC ACACCTGGACA	60
GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT	120
TTGTGTTAA GAACCTGGTT ACACCTGGAGT CAGTTGCAGA CCAGAATGGA GAAAAGCACT	180
CCTGACTTGA GTTGGGTGAG CTTGGGACTG GATCACCTT GACCTCTTT ATTACCTAA	240

TTGGAGGGAA GAGCAGGGGA GGCAACACTA TTTCTCTGG GTGTTAGAAG AAGATTCGAG	300
CTTATTGGG CACTGGTCTC TATCTTGCC TTCAGCTGAA TCAACATCTA AGATGTTTTA	360
GATGCTTAGC TAATTCTCT TAAAAAAAAGA ATAAGCAGAG GCCGGACGTG GTGGCTATA	420
GCTGTAATCC CAGCAGTGTG GTCTCGAG	448

(2) INFORMATION FOR SEQ ID NO:620:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 457 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTGGNC TTCATGGCCT ACTTAAATCC ATCAAGTTAC ACAATCGATC TGTTGTCAGC	60
TGAACAGAAC CACATTAAT TTAAGCCAAA CACACCAATA GGAATGTTGG AGGTAGAGAA	120
GGTAATTTTA AAGCCAAAAA TGTGGATAA GAAAAAAACCT ACACCTATAA TACCAGAGAA	180
AACTGTGAGA GTAGTGATTA ATTTTAAGAA AACACAGAAG ACCATAGTGA GAGTGAGTCC	240
ACATGCATCG CTTCAAGAGC TTGCCCCCTA TATATGTAGC AAATGTGAGT TTGATCCGTT	300
GCATACACTA TTGTTGAAAG ATTATCAATC GCAGGAGCCT CTTGACTTGA CAAAATCTCT	360
TAATGACCTG GGACTAAAGAG AATTATATGC GATGGATGTC AACAGAGAGT CCTGCCAAAT	420
ATCACAAAAC CTAGATATTA TGAAGGAGGC CCTCGAG	457

(2) INFORMATION FOR SEQ ID NO:621:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 287 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTGGGCC TTCATGGCCT ACTCTCTGAT TTACAGATTG CTAATTAAT GGCTATTATT	60
AGTTTGGATT ATTAGACTT AAGAAAACAA CTAACGTGAGG GTTTTTTTTG TTGTTTTTT	120
GAGGGTTTTC TTGCGATGAG AATTGTATGT AACCGAGTGT ATGATTATTC CTGAATGTAC	180
AGACAGAAAGT AAGCCTGGAC ATTGTTAAAT AGTCCCCTGCT TTAAGGGACT ACGATAATGT	240
GTACTATGAC AACAGTGCTT TATTCTTCTA ACGCACTAAG TCTCGAG	287

(2) INFORMATION FOR SEQ ID NO:622:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 328 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTGGGCC TTCATGGCCT AGTAGGTGTA TCACAGATT CTAATGTAGA ATGGTCAGTC	60
CAGGAGTAAT TGTAAATTGTC GAAAAATGGA GAATTATAAA ACAAGAATGA TGTCAAAAA	120
AGGACACAGT TGAATTCAATC TGTGTTCTC TAAACTATTT CATTACTCA TTCAATCCAAG	180

TTTGAAAAAA TGTTGGGAGT CTGAAAATT CCAGGCAC TC TGGATAAATG AGTATGGAAG	240
AATCCCTCAA AAGAACCTTT AGTCTACAGG GGAACATTA TAAGCAATCA GGGACTTGAG	300
ACCTACAGTG CTGTGGAAGA TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCCGCC TTCATGGCCT AGGACGTTTG GGTTGTTTCC ATCTCAAATA AATAAATAAA	60
TAAAAGTCTA TAAAAACAGC TGGGCCAGG CATTAAAAAA AATGTTCGGT CTTCTAGTTT	120
AGTCTTTTAT TGTCTATGCA AATTCTTTCG CTATTGAAC T ATCCAAGCTT TCTCTTTTA	180
AGCTTTGGG GAATAGGTTG CAATACATT CTTGTCTACT GTTTCTCTTA GTGTTTTCTA	240
ATTCTAACCC ACTGTTTTTG GAATTCTAT TAGATGGTT TGCAACTTCT GCATCTATCC	300
TCCATGCACC TTCACATTC CTTCACAGT TTCTGCTGT TTTCCTTGTG TGCTACATTC	360
TGCACAGGAC TCGAG	375

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 763 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCCGCC AAAGAGGCC ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC	60
ACCCCTAAGAA GAAAGATTCA CACTGCACCA GGAGACATCA GAAAGAAATGA AAACTCTGCC	120
GCTGTTGTG TGCATCTGTG CACTGAGTGC TTGCTTCG TTCAGTGAAG GTCGAGAAAG	180
GGATCATGAA CTACGTACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT	240
ACACATTTAT CCTGGACTGC TAGCTCACCA GAAGCCGTT ATTAGAAAAGT CCTATAAATG	300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCC	360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAATAGC AGTGTGGTCA ACCCTACCTT	420
AGTGGCTACA ACCAAATTC CATCTGTGAC TTTCCTCATCA GCTTCCACCA AAATTACTAC	480
CTTCCAAATG TGACTTTCTC TCCCCAGAAT GCCACCCACCA TATCTTCAAG AGAAAATGTT	540
AAACACAAGCT CTTCTGTAGC TACATTAGGC CCAGTGAAATT CCCCAGCTCC ACAAGACANC	600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC	660
ACCCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCACAT ACACNAGCTC CACCATCTTC	720
CTCAGCTCCA CCAGAGACCA CAGCTGCC ACCCATCTTC GAG	763

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAATTCCGGCC	AAAGAGGCCT	AGTAGTTCT	ATGTGCGTC	TGGGGTGGGG	GCAAGGCCCT	60
TGTGTTCCAC	TGGTTCCAC	CACGTTGACA	GCAGTCGCTG	GCAGCAGAGA	GCCATTCCCT	120
GTCATGCTGG	TCTGTTCCAG	GACTCTGTGG	AAGATTCTCT	ATCTCCACTG	GCACAGGAGC	180
AGAGGAAATG	GAAGGACTCA	CAGGCAGAGC	AGATCTCATC	CCCCAAGCCT	GTTGGGAGCC	240
ATTACTTGG	TCTGAAACAT	TATTGTAAC	ACTAAGTTCT	TCAGGTTTG	TAGCACATGC	300
TTTCATTGTG	AGAGTTCGTC	TAGAATATCG	TTTGCTGGC	CTTCTTCAA	AGGATGTTGA	360
TCTCTTGCT	TTATTGGTTT	TTGTGGTCTG	ATACTCTGTT	TTCCCACATAT	ATCTAAATCG	420
TGATCCTAGT	CGAATAATC	CTGATCGATG	AGAACTCTT	TGGACGGGGC	CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GCGATTGAAT	TCTAGACCTG	CCTCAACTGT	CTGGTTCTCT	GTAAAAATAAA	CACATTGTTT	60
TATATTTTTA	GGGAACAAAA	AGTGCTGCTA	TAGGGTCAA	AGTTTCCCTT	CTGAACACTT	120
TTCCGAAACA	AATTACCCA	AAGACACATT	TTGAATATCC	TGTCACATC	TTTGGATCTG	180
TAAAATATAC	CTTTAGTAT	GGCACCTGTT	AAAATGCAA	GCAAAACCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCCGGCC	TTCATGGCCT	AGGCCTTG	AATCATTCA	CATAAGGAAC	TGTCAATATT	60
TTTTTGAGCT	GTCAGAAATC	CATTTAGTGA	TTTCGACAA	TTCAAAAAAA	TATTTCTGAC	120
CGCTTGATTTC	AGTTCTCTAGT	GAATTAGGGA	AGAACAGGAA	TAAAAGAAAT	ATATCAATCT	180
AAATTATGAA	CCCAGAGTCT	AGCTTCTGAA	ATTCTTCTCT	GTCCTTAAAC	GAACACAGG	240
ATGTTGAGGT	TCAAAATAC	TCTCTCTAT	TTCCCCCTT	TCCTCCCTT	TTCTTCCCTT	300
CTCTTCCATT	CCTCGAAAAG	ATAATAAAAC	AGAATGTGCC	TAGAGCTTCT	GGAAAGAATA	360
CAGTCCTGCT	GATACTAGAA	CTCAGTGAAA	TTTGCACCA	ATTTCTGAGC	TACAGAACTG	420
AAGATAATTG	ATTTATTC	AGCCACTGAG	TTTGTGGTAA	ATTTGTTACA	GTAGCAATAA	480
AAATCTAATA	CATGCCTCT	ATACCAGAAG	TACACATCA	CGTGACCA	CCTGTCC	540
CCCCACACAC	ACATACACAC	ACACACACAC	ACCGCACACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCTGGCC	TTCATGGCCT	ACCTGCCTCG	AGTTCTACT	GCCCCGGGC	GGCCTGCACA	60
GAGCTGCTGC	CCTCCAGAGA	CTGTGAATCC	CAAGCCTGAC	TCAGTGGACT	GCTTCCTGTT	120
CCCCTCCCTC	CTCTTCCCTCA	CCTTGTCTG	CACCCCTCAAG	CCTTTCTCCA	ATGCCCTCCA	180
GGAGGATTTC	GGGACTTTCT	CCCTGGGGCG	CCCAGATCCA	GCTCGGAGGC	CTCACTGGGA	240
CCTGGCAAGG	CCTGACCTCC	CGCCCAAAC	TGCTTCTGTA	GCCCCCTAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCTGGCC	TTCATGGCCT	AACCTGTTGC	TTCCCTGGG	ACTGAAGGCA	GAAGTGACTC	60
CGGAAATTCT	CTTTCTGGAC	TCAGAAGGAA	ACCCAAAGCA	TTGATGACAC	CGCATCCCAT	120
ACTAAAAGCT	ATGGAAGAGA	GAGCAATTCA	ACGAGCTGA	TGTAGGCGGA	TCTTGGCAGA	180
GAAGNAGAAA	AAACAAGAAC	AAGANAAATT	GGCCCCACTTA	AAGGCCAAG	AGGAGGAACG	240
TCAGAAAAGG	GAGGCAGAAC	AAAAGGAGGC	ACAGCTGAA	AGAAAACCGAG	AAGAGAAGAG	300
ACTGAAGAAA	ATGAAAGAAC	TTGAGAAGCA	GAAGAGAACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

GAATTCTGGCC	TTCATGGCCT	AGTTCTTCCT	TAGGAACAAG	GGCAGGGACCT	CAAACAGTCC	60
AGAGGAGAAC	CCTGGGGTGG	TCAGGGAAGG	CTTCCTGCT	GAGAGGACAG	GCTTAGGGGC	120
ACCTTGAAAG	TTCAGGCTGA	CTGGGGCTAG	GGGCATGTGG	GTAACAGGTT	AAAGGGGGGG	180
GGGCTGGAAA	ATGCAGACAC	CAAAGACCT	TCAATATGAG	GCCAAGAAC	GAAGGTTCA	240
AACAGGGATC	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GTTCCAATC CATGGGAACC AGCACAGGAG CTACAGCAAA TCATGGCACT TCTGCAGTAG	60
CAATTACTAG CCATGATTAC CTAGGACAAG AAACTTGAC AGAAATCCAA ACCTCACCG	120
AAACATCAAT GAGAGAGGTG AAACGGACG GAGCTAGCAC CCCCAGGTTA AGAGAACAGG	180
ACTGTGGTGA ACCTGCCTCG CCAGCAGCAT CCATCTCCAG ACTCTCTGGG AACAGGTCG	240
ACGGGAAGGG CCAGGCAGGC AGTGTATCTG AAAGTGCAG GAGTGAAGGA AGGATTAGTC	300
CAAAGACTGA TATTACTGAG CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAAAAAATGG AAGAATTGT TTGTAAGGTA TGGGAAGGTC GGTGGCGAGT GATCCCTCAT	60
GATGTACTAC CAGACTGGCT CAAGGATAAT GACTTCCTCT TGCACTGGACA CCGGCCTCCCT	120
ATGCCCTTCTT TCCGGGCCCTG TTTTAAGAGC ATTTTCAGAA TACACACAGA AACAGGCAAC	180
ATTGGACAC ATCTCTTAGG TTGTTGATTC TTCCCTGTGCC TGGGGATCTT TTATATGTTT	240
CGCCCAAATA TCTCCTTTGT GGCCCTCTG CAAGAGAAGG TGGTCTTTGG ATTATTTTTC	300
TTAGGAGCCA TTCTCTGCCT TTCTTTTCA TGGCTCTCC ACACAGTCTA CTGCCACTCA	360
GAGGGGGTCT CTCGGCTCTT CTCTAAACTG GATTACTCTG GTATTGCTCT TCTGATTATG	420
GGAAAGTTTG TTCTTGCT TTATTATTCT TTCTACTGTA ATCCACAAAC TATTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC TTCATGGCCT AGCGGGATCG TATCACTACG CACGTGGCGT CAATGACAAA	60
GACGCCCTCC CCACGGACA GGCCCTGGGA ACTGCGGGG AAGGTGTGGG CACGGCGGGT	120
CGCCCTTCAA CCTTCCAGGG TCTCCCGTCC TGGCCCTCTT CCAAGACCCA GAGATTCTCT	180
CCATCCGGTG CCTCCGGGAG CCCAGGGTCT GGGGAGTGTG TGCGTATGGC GGGCGGGCTG	240
CTTTTTAGGG GAGGGAATCC AGCATTTGGG AAACCAAGATC TGTTCTCCTT CTTCCCTTC	300
CCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

CCTCTGCAAG	AAATGCCTAA	GCGTATTATC	AGGAAGTGG	ATTATAAAAT	GTTTCAGAT	60
CAAATTAAGC	ATCTACAGGT	GAATTAAT	AGAATTAAGC	TTAGAAAGCT	TAAGTAGAAG	120
TTGAATGAAT	TGTGTTCAATT	CTTGAAACC	CATTGATTG	CAAACCAAT	ATTCACGT	180
CTATAGGAGG	CAATTCAAGAC	TGAAAATAAT	TTAGAAAAAA	AAATAGTCCA	AAAAAAA	240
TAGTTCTAGA	GATAAAATAGG	TCATTTGAAG	ACTAACCTCT	GCCATTAGGG	GTTTCTAAAG	300
ATAGGCTGAC	TCTATCTATT	TAATAATTAT	TTTGTTCATT	AACTCCTTGC	ATATAGAATT	360
CTAAGTATA	CCAGCCAGGT	ACGGTGGCTC	ACGCCCTGAA	TCCCAGCACT	TTGGGAGGCC	420
AGGGGGGCA	GATCACCTAA	GGTCGGGAGT	CTCTCGAG			458

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

GAATTCCGCC	TTCATGGCCT	ACCCACTCTC	ACTTTGTACC	TCTGTCAGTT	ATCTCCTCTT	60
TACCCCTTCTT	TCACCGAGCA	TACCAACCGGC	CCTCCCGAGCA	CCTATGGCCC	AAGCCAGTTG	120
TTTGCAAATT	TTTAACTGTG	ACACAGGACA	ATTTACACAC	ACATACACAG	TTTCACTTGT	180
GACATACTTT	TTTTTGAGA	TGGAGTCTCA	CTTCATTGCC	CAGGCTGGAG	TGCAGTGGTG	240
TGATCACACC	TTATTGCGAC	CTCAAACCTC	TGGGCTCAAG	TGTTCTTCTT	GCCTCAGGCC	300
CCCTAGTAGC	CAGGATTACA	GGCCTGCACC	ACCATTCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

GTGGATAACA	AAACAAACAAA	TCTGATGCTC	CCTGAGTC	CTGTTATGG	TGATGTGGAC	60
CTTAGTAACA	AAATCAATGA	GATGAAAACC	TTCAATAGCC	CAAATCTGAA	GGATGGCGT	120
TTTGTCAATC	CATCAGGGCA	GCCTACTCCT	TACGCCACCA	CTCAGCTCAT	CCACTCAAAC	180
CTCAGCAACA	ACATGAACAA	TGGCAGCGGG	GACTCTGGCG	AGAACGACTG	GAACCAACTG	240
GGACAGCAGA	AAACAGAAAGT	GGCACCAAGT	CAGTACAACA	TGTTGGAGCA	AAACAAGCTG	300
ACAAAGATT	ATCGAGCAA	TGACACAGGT	CCTCCAACATA	TCCCATAACAA	CCAATCATAC	360
GACCAAGAAC	CAGGAGGATC	CTACAAACAGC	ACAGAGCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GCTTCCTCGC	AGCAAGCGGC	TGGAGATAGA	GAAGAGCTTA	CTGGTGCAG	CGTCGTCGA	60
CCCCGTCGCC	GCTGACCTAG	AGATGGCAGC	CGGTCTCAC	GACATATTTC	AGCATGATAC	120
ATACTGTGGT	GATGTCTGGA	ACACCAACAA	ACGCCAGAAT	GGCAGACTCA	TGTGGCTCTA	180
TCTCAAATAC	TGGGAACCTCG	TTCGTGAACT	GAAGAAGTTT	AAGAGACTAG	AGGAAGCCAT	240
ACTAGAAAAG	TAAGACAAGA	GTGAAATCAA	ACTGCTTTA	GTGACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GTCGAGAAAA	TGGGGATAAT	GGAGAAAATTG	TGGGCAAGCT	GGCTTCCTGG	GAAGGGACTA	60
ATTGAACAAG	ACAATGATT	ATCTTTCCG	GGTCAGAGG	CAGCTTGTA	ATTGAAATT	120
TTTCCTTAT	TTTGCCCCAC	AAGTGTGTTG	TTGTCCTTT	CTCTGGCTTT	TTACCTGATC	180
AGGCTGCAAG	CTGCAAAGCT	GTGGCTTG	CTGCAGATT	CTAATAAAAG	ATGACAGGTG	240
AGAGAGACAG	TGGTGGAACT	GGTAGAGCTT	GCACCTCCAC	ACGGTGTGGC	TGCTCGGGAG	300
GCTGTCTAGT	GCACCTGCCA	ACAGAGCACA	GATATCCCT	CTTCCTCATT	TCAGATTCC	360
CCTTCCAGCT	GTTTACTAAA	CAGCAACAAA	AACACCTCT	TGGCTGTAAAC	TTGTCAAATA	420
AAGTCCCCTGC	AAAGTGTATA	AGATTTCT	CCCCAACCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GCGAGGGAGA	TGGCAGCCTG	GGCTTAGCA	GCAGGGAGGA	AGGTGAANAA	AGAACCGGGG	60
CTTGCAGCAG	AGGTGGGTC	TGCTTAAAG	GCAGAGACCC	CCAACAACTG	GAATGCCACG	120
GAAGACCAGC	ATGAGCCTAC	CAAACCTTG	GTTCGCAGGG	CTGGAGCTAA	TTCTCGCTCC	180
AGGAGAAAAGA	AGCAGAAGAA	GAACCTCAGG	CAGGAAGCAG	TGCCCTGGAA	AAAACCCAAA	240
GGCATCAATT	CCAACAGCAC	AGCTAACTTG	GAGGATCTG	AGGTGGGTGA	TGCTGAAAGC	300
ATGGCGATCT	CAGAGCCGAT	CAAGGGCAGC	AGAAAGCCCT	GTGTGAATAA	GGAGGGAGTTG	360
GCTTGTAGA	AGCCCCATGCC	GAATGTGCC	TGGAGGGTC	CCAGAGAGCC	ACCTCAGGAT	420
GCCCGGGCAG	AAGCCGAGAG	CCCAGGAGGC	GCCTCTGAGT	CAGACCAAGA	TGGTGGCCAT	480
GAAAGCCAC	CAAAGAAGAA	GGCCGAGCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCCGGCC	TTCATGGCCT	ACACCTCAGC	CTCCAGAGCA	GCTGGGACTA	CAAACGTGTG	60
CCACCATGCC	GGGCTAAATT	TGTATTTTC	AGCAGAGGTG	GGGTTTCACC	ATGCTGCTGG	120
CCAGGCTGGT	CTCGAACCTCC	TGGCTTCAAG	TAATCTGCC	ACCACAACCT	CCCAAAGTGC	180
TGGGATTACA	GGTGTGAGCC	ACTGCGCCC	ACCAAGAGCT	CCTTTTTGTT	TTCTTTTTT	240
TGTGAATTG	GATTCTTAT	ATTCAGGAGT	TTTACTTAAA	CTTGAATCT	GAAAGAAACT	300
TTAGGAGGAG	CTCATAGATT	TGTGGGAAGA	AGCAAATCTA	CATTATTTTC	TCTCTTCTAA	360
AATCATATTTC	CATGTATTTT	GATCTTTTAC	TGAATTTAA	CACATTGTTT	CATCACTAAC	420
ATAAAGTGT	TCAATAGTTT	TTGTAACTCA	CACACAAATA	CTGGATTAA	AAGTTATATA	480
CCTGAGTATA	TTTTATGGC	AGGTCTCGAG				510

(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

GAATTCCGGCC	TTCATGGCCT	AGTGTCCCCA	GCCAGTCTCT	ATTCTCTCAC	CTAACACTCT	60
CAAGGAGATA	GAAGCTTCAG	CTGAAGTCTC	ACCCACCAACG	ATGACCTCCC	CCATCTCAC	120
CCACTTCACA	GTGACAGAAC	GCCAGACCTT	CCAGCCCTGG	CCTGAGAGGC	TCAGCAACAA	180
CGTGGAAAGAG	CTCCCTACAAT	CCTCCTTGTC	CCTGGGAGGC	CAGGAGCAAG	CGCCAGAGCA	240
CAAGCAGGAG	CAAGGAGTGG	AGCACAGGCA	GGAGCCGACA	CAAGAACACA	AGCAGGAAGA	300
GGCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

GAATTCCGGCC	TTCATGGCCT	AGTTAGATGA	AAATCTAAAG	GATGAATACT	TTGAGGAAAT	60
CATGGAAGAA	TATGAAGATA	TTAGACAGGG	CCATTATGAG	TCTCTCAAGG	AGAGGAGATA	120
CTTACCCCTTA	AGTCAAGCCA	AAAAAAGTGG	TTTCCCAAATG	GATTGGCTGT	CTGAACCTCA	180
CCCACTGAAG	CCCACGTTA	TTGGGACCCA	GGTCTTTGAA	GACTATGACC	TGCAGAAAGCT	240
GGTGGACTAC	ATTGACTGGA	AGCCTTTCTT	TGATGTCGG	CAGCTCCGGG	GCAACCCAC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

GGCGATTGAAT TCTAGACCTG CACCCAGCCA ACACTGAGAG ATTTTAATGA GTACTTTTAT	60
CCACCTGACC ACCATCATTA CCTATCACCT GTCATTCTTC ATCCACCCCTA CATCCATCCT	120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCACTATG GAACCATTAT	180
CCATCCAACAT ATCATCCAGC CAGCCAGAAA TGACCCATTG ATCTTCATCT CTCATTTCTT	240
CTCTCTAAAC CAGTTCTAA TCTGGGGCCA AAGTCCTACC CACACATCCC TTAGTCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

GAATTCTGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT	60
GTTCCTCTGC ATGTTATTTG ATGAACATGA CCTGTTTTCG TGCACTAGAC ACACAGAGTG	120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA	180
TGCAAAGGAG GTGTTCAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTC	240
CTGCATCCCT TGGCTGTGAT GCCCCTCTCC CGATTTCCA GGGGCTCTGG GAGGGACCT	300
TCTAAGAAGA TTGGGCAGTT GGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC	360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGAC GCCTCGAG	408

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

GAATTCTGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTTAGGATG ANTGGGAAGA	60
AGAAAAGAGAG GAAGTAAACT TTAATTATGC CTTTTGGGT TTATTATCCC TGATGCAATG	120
GGCCCCCCCAC TGCTGTGTCC TTCTCTGTG GGCTAGGGTT AGACCAACACA GGCTAAACTA	180
ATTCCGATTG GCTAATTAAAG AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGGTT	240
ATGACAGAGC AGGTAATAGG AATGAGTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG	300
TGGAGCAGGT AATTGGAATG AGTCAGGGTA GAGCAGGTAA TCGAAAAGG TTGCTTTGCT	360
CGAG	364

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

GAATTCCGGCC TTCATGGCCT AGGAGTCAT TTGGATCTAG TGTTTCTAT CAATCTGTCT	60
GCTGATGTGG CACTACTGCA CCATTTACCA CAAACATTAGA ATATGTCAGA GTAACTGGTT	120
GCCTTAGAATT TTTTGCCATTG AGTCCCACCC CATTTCAG AACTTCATG GCTATTCCTTA	180
TATGTTTGTG TTCCGTAAGA TCTTTAGGAT CAATTGCT AGTTCTAAAG AGGAAATTCT	240
GATATTATTG ATTTAGTAAAC TTCCATGAA AAAAACCTAC CATCACAGGA AAGATGCACA	300
TTAATTACAG GTAGCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

GAATTCCGGCC TTCATGGCCT AGTCAGTGGC TAGATTGATT GATCCTCCAG AATTAGACAC	60
TCACATGTTA ACACCAAGTCT CAGTTGGAGG GCTGATAGTA AACCTTATTG GTATCTGTGC	120
CTTCTAGCCAT GCCCATAGCC ATGCCCATGG AGCTTCTCAA GGAAGCTGTC ACTCATCTGA	180
TCACAGCCAT TCACACCATA TGCACTGGACA CAGTGACCAT GGGCATGGTC ACAGCCACGG	240
ATCTGCGGGT GGAGGGAGG TCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

GAATTCCGGCT TCATGGCTAC TTTTGGTAAA GCATACCCAA CCTTCAGTTA GAATATCTCC	60
TGATAATAAG AAAGATCTCA TTGAAATTAA TTAATTCTTT TGTGTCTAGT AGATAACTTG	120
GATGGCACAC AGTGCCTTGA TTTTACCTG CCCAGAAATT AACTCTCTAC CCTATCTAC	180
ATGATTTCCTCTC CCCCTCTCTC TTTTATTCCA TGTCACTGGG AATGGCAGGT	240
CTTGCACCAA GTAATGGCAG GTCTTGACCA AAGCAAGCCA GAAACCTGAG CTTCAGTCTT	300
TATTCCTCTCC CACTTCTCGA G	321

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCCGGCC TTCATGGCCT AGAGGAAGTG AACGGATGGG GCCTCATCCT CCTGCCTCCC	60
TAAAGGGTGA GGGTGGAGG ATGGGGCTGT GCCCTCTAG GGCAGGGAAA AACAGCTTGG	120
AGGGTTTCTC GCCATCAGAG ATCCCATAGG AGGCAGGTCA GTCTGCAGA ATTCTCCCC	180

AGTCTGGCCT CCAGCCTCCC TGGCCCTTT CTAGAGGCCT CCATCCCACT GGCGGCTTGC	240
TCCTGCCACC GGGCCTCTGC ACAGTCACCT CCTGCAGCCT GGGGTGTGTC GCCTCTCCAC	300
GTCITGATAT TTTCGCTGGA ATGCAGACGA TACTATATT ACCGTATAAT ATATATACAG	360
CTCTCCTATA TCTCAGTCAA TTTACATAGT TTAAATAGA ACATCTTATT AAAAACATCT	420
AGATATACAC AGATTAGGAA ACCCTTACAA CATACAAATA CACAAACTAG AAATAAATCT	480
TTAGCATACT GGTATATACA ACAGTGTGAT ACAATAAATA ATTCATTCA TGCTCTATCT	540
ACACATCATA TTGCTCGAG	559

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GAATTGGGCC TTCATGGCCT AGGGAGACTG AGGCAGGCAG ATCACCTGGG GTGGGGAGTT	60
CGAGACCCAGC CTGACCCAGCA GGGAGAAAACC CCGCTCTAC TAAGAATAGA AAATTAAGGTG	120
TGGCGGTGCA TGCCCTGTGGT CCCAGCTACT CGGGAGGTG AGGTAGGAGA ATCCCTTGAA	180
CCCGGGAGGC CGAGGTCTATG GTGGGCCGGG ATTGCACCAT TGCACCTCCAG CCTGGGCAAC	240
AAGAGTGAAA CTCCATCTCA AAAAAATAAA AGCCTAGCCT CCCAAAGTGC CAGGATTACA	300
GGCATGAGCC ACCGCGCCTG TCTGTCCGCC CGTCTTCTTT TTAAAGAGCA AGAAAAGGTT	360
TCCCGAAGT ACTCTGGTAG ATTCTTATACA CACACACATT CCTAAACCCAG TTACTGGCAA	420
AGAAAAATAGA ATTATCATGA TTAATTAGCA TATTCTGAAG NACATGCTTC CCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

GTGTGAACCT ACGGGAAGGC GGCGCCCTGC ACCTCTGTGC GGAGACCAAG GATGATGCC	60
TAGCATGGAA GACAGCACTG CTGGAGGCAA ACTCCACCCCC GGTGCGCGTC TACAGCCCGT	120
ACCAAGACTA CTACGAGGTG GTGCCCCCA ATGCACACGA GGCCACGTAT GTCCCGAGCT	180
ACTACGGACC GCCCTACCGCA GGCTCTGGCG TGACGCTACGT GATAGTGCAG GAGGATCCCT	240
GCTACAGCGC CGGGCCCCCT CTGGCCATGG GCATGCTTGC GGGAGCCGCC ACTGGGGCGG	300
CGCTGGGCTC GCTCATGTGG TCGCCCTGCT GGTTCTGAGC CCTGGGACTC GGAGCACTGA	360
CCCCCTGCGCT TGGATTGCTA GACTCCTCTT CCTCCTGGAC CCCATCCTCT CGAG	414

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

GAAGGAAAAAC ATGGGCACAG GGGATTTAT CTGCATTCC ATGACTGGAG GGGCGCCCTG	60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTG	120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTTCCATCAA	180
TGGCAACCCCT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC	240
AGACTCTCTC CAAATGCTCA TCAAAAGACC ATCCAGTGGA ATAAGTGAGG CTTTGATATC	300
TGAAAATGAA AACTCTAAC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:653:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 443 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

GAATTGGGCC TTCATGGCCT AGGTATTTAG GCTTTTGCT TAACAGAAA TCCCTGGCTGT	60
CTGGGGCCTG ATGACTGTGT TCCATGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC	120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC AGAAGGCGGG CTTATGGGGC	180
CTGCAAGCACAA CAGGGAAACT GAGCCCCACAC TGTGATAGGA GGGCAGACAC ACAGGATGTG	240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTT GCAAGGACTG GAGAGAAAAT	300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCTGCG	360
TTGAAAGCC TGGAAAAAAA CAGGATGACA GGATGAAAGAG GCCACAGCAC AGCTGCAGAC	420
AATGGGAGTG CGGAGATCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:654:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTACTTTGAA TACACAAACAG	60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCG CATCAGGGAG GTGGAGGACC	120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCCAGCCA CAAAGGGCAG GTCATCAAGG	180
CCTGTAAGAC GGAGGCCGAC GGCNGCGTGG TAGAGGGAA CCATGTGGTG TACCGGATCT	240
CAGCCCCGAG CCCGGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA	300
GATCCCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:655:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

GGGGGATAACG GATAACCCAAA CTTCAATGTT CCTTGATAGT AGGAAGGAGG ACAGTTATAT	60
AGACCATAAG GTGCCCTTGCA CAGATTCAACA AGTGCAGGTC AAGTTGGAGG ACCACAAAAT	120
AGTAACGTGCC TGCTTGCGCTG TGGAACATGTT TAATCAGCTG ACTACTGAGC CAGCTACAGG	180
GCCCTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG	240
AGATAGCAGT GCCTCAAAAG AGCAGTGTAA AGAAAACACC AATAACGAAC TGGACACAAG	300
TCTTGAGAGT ATGCCAGCCT CGGGAGAACCC TGAAACCATCT CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT	60
CAATCGACGG TTTAGGCTCC CTATACTGAG TCGTATTAA TTCAGAGGTG TATTAA	116

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT CGTTAGAGAT	60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAT GCAGGTGAA GGGATTCTC TGGGGCTTG	120
GGGAATTAGT TGCGTGGGTG AGCCAAGAAA ATACTAATTAA ATAATAGTAA GTTGTAGTG	180
TTGTTAAGT TGTTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA	240
CTTTAAGTGC AAACAGACAA ACTAACAAAC AAAAATTGTT TTGCTTGCT ACAAGGTGG	300
GAAGACTGAA GAAGTGTAA CTGAAACAG GTGACACAGA GTCACCGAGT TTCCGAGAAC	360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTTTTA CCAGCTTCGG	420
TGGCTGGCAC GTGTTACCAAG GCCGAGTGGG ATGACTATGT GCCAAACTG TACGAGCTCG	480
AG	482

(2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTCGT GCCTCTTGT	60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT	120
GCTCTTCGGA TTTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTG CTATTGGACT	180

ATGGCTCCGA TTGACTCTC AGACCAAGAG CATCTTCGAG CAAGAGAATA ACCATTCCAG	240
TTTCTACACA GGAGTGATACA TTCTGATTGG AGCCGGGCC CTCATGATGC TGGTTGGTTT	300
CCTGGGTGC TGTGGAGCTG TACAAGAGTC CCAGTGATG CTGGGATIGT TCTTCGGTT	360
CCTCTGGTG ATATTCGCCA TTGAGATAGC CGCCGCCGTC TGGGGCTATA CCCACAAGAG	420
TCGAGTCGAG	430

(2) INFORMATION FOR SEQ ID NO:659:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC TTCATGGCCT AAGAGTACAG AGATTTACT TCATCTTG TG CTAATGTTTA	60
ATTNAAGTA TATTGACACT AGTAAAGACA CTTTATTGTTA ATTTGAGGTA TAAATGTCTA	120
CCTAAAATAG ACTATTTCCA TTGAGTCATA CATTGAAAT GTGATATATA TTCTTATATT	180
TCAGAAAATG ATAACATATCA TAGAAATCTA ATACTCATTA ATTGATTA AAATTATTTT	240
TTCCCTCAAA TTGGAAATA TCTTTCCCTA TGTAATGGTC ATGTCTCGAG	290

(2) INFORMATION FOR SEQ ID NO:660:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GAATTCGGCC TTCATGGCCT AGTCAGAAAGT CTTTGTGTC CTGTTTTGT GTCATTTC	60
TGTACCTTGG CACTTTAAGG CTTGTCCTGC AAAATAAAC ATTGCATCAT CACTTGTGAA	120
GGCAGAGCTT GGGAGTTTGC ACTGCTAAGA TGAGGATAGG AAAGAAATTT ATGCCGCA	180
GCTTTGATG CTGCCCACTC ACCTGCTGTC ACAGCCAGGG CACGCCAGC GGGAGTGGAG	240
AAGACGAGCG AGACCAAAC CTTGCCGTGG GGAGGAGGGT GGCAAGCCA TTGATAATTC	300
GGGACTTGAA CTATCCCAC ACTCTAAAAA TATTTTTAT CTGATACAA AAGTAATAGA	360
TGGCCAGGCA TGATGGCTCA TGCTGTAAAT CCCAACACTC CTCGAG	406

(2) INFORMATION FOR SEQ ID NO:661:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

GAATTCGGCC TTCATGGCCT AGTGGAACTG AAAACTCAGA GGAGGCATCA AACCCAGGCT	60
TGGGGACAA AACTAAGTCT TGCCAGAGTC CTGAAGGATG AACAAAGCTT AACCAAGCAA	120
GGGATACTGG AGGGCATGGA GGCTCTCTGG CCTGGAGTGC AGAGCATGGA GTGCTCAAAG	180

AGCTAGTTAG CTCTGCAAAG CTGAGTGTCAGGAATGTAAGGGAGAGAAT AGGAGTGAGA	240
GAAGAGTCTG CCAAGGCAGA CAGGGAAAGGC CTATATGCCCTGATGGAGAA CCACGTGAAGG	300
ATTAAAGAA GGAGAGGGTT AATTTTGTCCTAATAGAAAGA TCACATTGTG TGTAATGTGG	360
AGGATGGGTT CCAGAGAGAG AAGCTAGAGA CCAAAAGATG AGACGGGAAC AGCTGCAAAT	420
TCGAGAGCT CGTAAGATTA TGTATGGCTG GACCACTCGA G	461

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

GAATTCCGCC TTCATGGCCT AGCCTGAGCT CAGGAGTCA AGACCAGCCT GGGCAACACA	60
GTAAGACTCC ATCTCTACTA AAATACATAA AAATTAGCTG GGCCTGGAGG CATGCACCTG	120
TGGTCCCAGT CCTACTGGGG AGGCTGAGGC AGGAGAATTG CTTGGGCCCG GGAGGCAGAG	180
GTGCGAGTGA CGCAAGATCG CGCCACTGCA CTCCAGCTG GGCAACAGAG CGAACACTCCA	240
TCTCAACAA ACAAAACAAAC AAACAAACAA ACAAAACAC AGTTATTTTT TTCTCACCAT	300
TCTAAAGAAT GTTACATTTG ATTCTTTTC AAAATTGGT CAGTTTTGAT AGTCTTATT	360
CTCCATACATT TCATCCCCC TTTTATTTG TGAAATAAT TGAACCTTAT ATTCTTATA	420
TGATAATTAA AATATCCAA GTCAATTGGTC ATATTCTCCA GTTCATGATT TCTGCTGAGT	480
TTGGTGTGCT GATTTCCTCG AG	502

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

GAATTCCGCC TTCATGGCCT ACAACCACCA ACATTTGTGTTTTGCAGAT GAAACAGGTTG	60
ACAGAAAGTCC CACTGGCTCA GGAGTGACAG CCCGAATTGC CTTACAGTAT CACAAAGGGC	120
TTCTGGAACCT GAAACCAGATG AGAGCCTTCA AAAGCAGTGC AACTGGCTCA GTATTACAG	180
GGAAAGCTGT GAGGGTAAGT GGCACCTTA GCCTCTTATT TATAATGTG TCACTCATGA	240
CACTGGAGAG GGCCTGAGTT GGTGTTGAT AAATTTCTTC ACTCAGCTCT CAGAAGAGAA	300
TTTTAAAGCA GGCTGTAAC AACTCTTT CAACTAGGAC ATTGGTTATC CAGTGTGTC	360
TTGGGGCCCC AGCGGGCCCC TAAGGGCTT TCACATGGTT CAGAGGGTCA AAACATGTGTT	420
CATAATAATG ACATTATTTG CTTTCACTC TCATTCTCTC AAGAGTGTAC AGTGGTTAC	480
TCGAG	485

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCCGGCC	TTCATGGCCT	AAAAATTATA	AAGTGTAAA	TATCTTGTA	TCTCTAGTTT	60
TTCTCCCTTC	CCCAGATAAG	AATAAAAGCA	GGCTGCAGGC	TCCTGGGTTG	ATÄACCCACT	120
TGGGTGGAGT	TCCATCGCTG	TTGGCGATAA	ATCTTGTTGG	TGTTCACTTT	TTGGGTTCTC	180
ACTACCTTAA	TGAGCTATAA	CACTCACCTC	GAAGGTCCTGC	AGCTTCACTC	CTGAAGCCAG	240
CGAGAGTAGC	AACCCACAGG	CAGGAGAAA	CTCTGAACAC	ATCCGAACAT	TGAAAGAAC	300
AAACTCCAAA	CAAGCCGCTT	TTAAGAACTG	TAACACTCAC	AACTCGAG		348

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCCGGCC	TTCATGGCCT	AGTCGTTATC	AGAGGTGGAG	ACATTAGAA	GTTGTTCTTA	60
ATCAGAGTGA	AGCTTGTCGCT	TCGGAAAGTC	AACCTCACTC	CTCAGCACTC	ACAGCACCTA	120
GCTCTCCAGG	TTCCCTCATGG	ATGAAAGAAGG	ACCAGCCAC	ATTTACCCCTC	CGACAAGTTG	180
GCATAATATG	TGAGCGCCTC	TTAAAGAGACT	ATGAAAGATAA	AATTGGGAG	GAGTATGAGC	240
AAATCCTCAA	TACCCAAACTA	GCAGAACAT	ATGAAATCTT	TGTGAATTTC	ACACATGATC	300
AGATTATGCG	ACCGTATGGG	ACAAGCCAA	CAAGCTATGT	GTCATGAAGC	TTTGTACAT	360
ATCTGGGTAC	CAGGTTTGAC	CTCAAGAGAT	GGCTGCTGTA	CACTTTTG	AACTGGTTTG	420
ATGTCACATT	TCAGCTCCAA	CTTGCATCC	TGAGAACACT	TAAACGTTTC	TGCAGGTC	480
TTTTATACAA	CTTGAAAGAC	CGTAAAACCTT	TCTGGTTGCC	ACAAGCATAT	CTTCTTTTC	540
TGCTCATCCA	ATAAACAGCT	GAGCCCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GGGATCATT	TTATTTCAGCT	ACTGAGAACT	AGAATATTAA	GAGACTGCTG	GCAAGGCAAG	60
CAGTTAATT	TCAGTGAAA	TTGCATTA	AAAAGGTAT	TTTCTTGCTT	TGTGGAAGCA	120
CGTGAATT	TGTA	AAAAGC	TGCTTGTTT	CCCCATTAC	AGGTTCTGTA	180
AGATGTGTA	CGGCTGC	AA	CCAGGTGTTT	TTTTCTGAGG	CTGTTGAC	240
GAGTGTGTTG	GTGTTTGCT	CGGCAGCTG	AATCCTAGCA	TGACTATACA	TTGTGACATG	300
GTCATTACAT	ATGGATTAGA	CCA	ACTGGAG	AATTGCCAGA	CTTGTTG	360
ATCTCAGTCT	TGAATTACT	CACGCTG	TGTGAATTAT	TCTTTCC	TTAATGTGT	420
TGGTTTATTC	AGGCCATCT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

GGGAACGTGAC	AAGCAATTAA	CTGGAGAATA	AGTGAGGGGA	ATGGAGCAGT	AGTATTCTTT	60
AACCTTAATTTC	GCCATTAAAG	AGAGCACTTG	GAATCTGAAG	AAAGTCTATC	CCTACCAAGG	120
AAACGGGAGTC	AAATTGCAAT	TAAGATTAAAC	TTGGTTATA	TGGAAGCAAG	AATCATGCTT	180
CTCATCATCA	ATTGCGTCTC	TTTGGTAGGC	AATAATTCCA	TCTGTAATCA	TGGCAGCAAC	240
TTAACGTTATTG	CCAATGTTTT	CAATGTTGTT	ACAGCATTA	GGCATCCACA	TCTAAAGAGG	300
CAGTTTAAAC	CAAGAGGAAA	ACCGAAACTGA	AATGTGCCAA	GAAGTGAACA	CGGACATGGC	360
CTCTCTTGGAA	ATACTGCCCA	CCATGCCAGC	AAAGCTCTCC	TCCAGTCAAG	AAGGCCTGTG	420
CCACGCTGCT	TGGTTCCCTG	CTGCCTGAAG	ATGCATTGA	GCCCTATGAG	ATTAGTATGG	480
CTATTTCTGT	CTGCTGACCA	GGAGAGAAAT	GAGTAGTTCT	CGAG		524

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

GAATTCCGCC	AAAGAGGCC	ACACAGAGGG	ATAATTGGCA	TTGGTATCAA	CTGACATATT	60
CACAACCTTG	AATAAAAATT	TCCACATTG	GAAAATCACC	ATGCCCTGGCC	CCTAGGCTAT	120
ACTTTGAAAAA	CCACTGCTTT	AGTGTGTTAG	AAATTGTTAC	CCTCATACTA	ATATTTACTA	180
CACCCCCCCCAC	CTTGACAAATA	CATAACAAAG	AGGAGTAACA	TTTCCCATTA	ACCTTTCTAA	240
ATTTGAGTCT	TATTAACCA	GACTCATAGC	CCTGTTGAC	TTTCTCTCCT	GATCTGTGCC	300
TTATCCCTAG	GGCGGTGATC	ATGCCGGTAT	CTGCTAAATG	GCAGATGTGA	GTGTTTATAC	360
CTATTTACAA	GCAACTCATT	GCACAAATAA	TTTTAGCTAA	AGAAAACATC	CATGCCAGA	420
GAATAAGTTT	TGGAATTGAA	TATGTTAAAT	GAGCTTATG	TTTACCTTTA	AAAGCTTAAA	480
ATATTTACCA	TTCATGGATT	ACCTTTTTC	AGAAAAGTAAG	AATATATAAA	TTACATTAA	540
TCTTGAAGCT	CGAG					554

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

GAATTCCGCC	TTCATGGCCT	AATCGTATTC	CATCTACTGC	ATACTTTCA	TAGATGTCCT	60
CCATCAGAAG	CACCTATGGT	TGTTTGTAA	ACGTGTATT	TCCGTATCCC	ACCCAGGAT	120
TTCTGAGTAT	TCTAAGAATT	TCTAAGTGTAA	AGGCCTGGAA	ATATGCATT	TACAACCCCC	180
TAGAACATTC	TTATGTGCAC	AAAATTGAA	GAACCACTAA	TCTGGTGTAT	ATACTGTTGT	240
TACTTAATAT	TTTCTTAATG	ATAGATACTT	GGATGATTTT	TGACTTTATT	ATTATTATAA	300
GCAATGTTGT	AAACATCACA	CAGGCCAAG				329

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

GGCGTATGAT ACCTAAAGTG GAGTGGTCGG CGTTCCCTGGA GGCGGGCGAT AACTTGCCTC	60
TGATCCAGGT CCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA	120
CCATGCCACCA CCTGCTGCTG GAGCTGGAAAG TGATAGAGGG CACCCCTGCG TGCCCCGAAT	180
CTGGACGTAT GTTCCCCATC AGCCGCGGGA TCCCCAACAT GCTGCTGAGT GAAGAGGAAA	240
CTGAGAGTTG ATTGCACCAG ACTCGAG	267

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

GAATTCCGGCC TTCATGGCCT ATTATCTCTC AAAAACAAAG CAATAAGTAC CAAGAAATAG	60
CAACAAAAAT TAGCTTGAA GGTTGGTTTC TGAGGGTAGA AATGGCTCTT GATGCCATGT	120
GGAGCACATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCTGCCA CTTATTCTATT	180
TTATTTTATT TTATATTTTA CTTAAATT TTGAGATAG GGTTTCACCC TGTCGCCAG	240
GCTGGTGGGC AGTGGCTCAC TGCAGCCTCG AACTACCAGG CTGAAGTGT GCTCTTACCT	300
CAGCCTTCG AGTAGTTGGG ACAACAGGTG CACACCAACCA TTCCCTGGCTA ATTAAAAAAA	360
TTTTTTGTG GGAACATGGC AAGACCTTGT CTCTATTAAAC AACAAACAGCA ACAGCAACAA	420
CAACTCGAG	429

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

GTAAAATCGT TCTTGAGAGG AACGTCTCTG TGCAGAGAGA TAATGAGTTT AGCTCTGAGA	60
AGTGAGCTTG TACTGGACAA AACAAAGGG AAAAAAGAA GAGAACTGTC TGAGGAACAG	120
AAACAAGAAA TAAAGATGC TTTGAACTA TTTGATACAG ACAAAAGATGA AGCAATAGAT	180
TATCATGAAT TAAAGGTGGC AATGAGAGCC TTGGGGTTTG ATGAAAAAAA AGCTGATGTA	240
CTGAAGATTC TAAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT	300
ATGAAGTTG TGACAGACTG GATATTGGAA AGAGATCCCC ATGAAGAAAT ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:673:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GGTAGATACT GGTTTTTCGT ATCCTGCTTC TCTTAAGGGC AGCTCTTTT AGCATACTCC	60
CATGCAGCAA CAGAAATTG TATCTTTTT TCTCTTTTG AGATGGAGTC TCGCTCTATC	120
ACTAGGCTGG AGTGAGCTGG CACAATCTCG GCTCACTGCA ACCTCTGCCT CCTGGTTCAA	180
GCGATTCTCC TGCCCTAGCC TCCTGAGTAC CTGGGACTAC AGGTGCGC CACCACACCC	240
AGCTAATTTC TATATTTTA GTAGAGACGG GGTACACCA TGTCGGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GGATGGACAT CAGCACTTTA CGGCGCCAGC TGAGACCCAC AGGCCAGCTC CGTGGAGGGC	60
TCAAGGGCTC CAAGAGTGAG GATTCCGGAGC TGCCCCGCA GACGGCTCC GAGGCTCCCA	120
GTGAGGGGTC TAGGAGAAC TCATCCGACC TCATCACCCCT CCCAGGCCACT ACTCCCCCAT	180
GTCCCCACCAA GAAGGAATGG GAAGGGCCAG CCACCTCGTA CATGACATGC AGGCCCTACC	240
AGAAGGTCCA GGACTCGGAG ATCAGCTTCC CCCGGGGCTG GGAGGGTCAG GTGCTGGAGA	300
AGCAGGAGAG CGGGTGGTGG TATGTGAGGT TTGGGGAGCT GGAGGGCTGG GCCCCTTCCC	360
ACTATTTGGT GCTGGATGAG AACGAGAAC CTGACCCCTC TGGCAAAGAG CTGGACACAG	420
TGCCCCCCAA GGGCAGGCAG AACGAAGGCA AGTCAGACAT CCAACTCGAG	470

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 637 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTGGCC AAAGAGGCCT AGTCGCTCTT GCTGAAACCT TCAATGCGAGT GAGCGCCCAT	60
CTCATGGGA CCTACAGGCT GAAGTTCTTC CTCTGATGGA CATGACCCCC GTGTTGTCTC	120
TAATAACCTC ACTTTCACTC TGTCCAGCC ACACGGGGTT TCTGCTTTTC TCGGGTCTG	180
TCGGGCTTAT GTGCCTCGGG CCCTTGCTC ATGCTGTTCT CTGCCTGGGA TGCGCTTTAC	240
TGGGTGCCAG GATGGTCAGT GATCCATTCT CTCTCAGAGT CTATTACAG GTCCCCCTCT	300
CGGTACGCC TTCTCTGGCT CCACTGTCTA AAATTCAC AGCTGCCCT GCCCCCGAA	360
CTTCATATCC CCCTTATCTG CCTTTTTCTC TTCAGCTCTT ACTTCATCA AATACAGTAT	420
GTATTTTAA AAGTCTTATC TTGTTCACGG TCATTTCTT CCACAGGTA A TTTGGTAAA	480
CTTGTAAGA TTGATGATGT TTAATACGT TTTGTTAAT ACAGTACCC CAGTTAGCA	540
CACAGCTTT GAATGAATGA CCAGTTTTA TTCCCTCTG AAGCGCTAAG AGCTGCCGCT	600
GAGGTGGCAT CTGTAGCNNGC TCCCGCTCCA ACTCGAG	637

(2) INFORMATION FOR SEQ ID NO:676:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 513 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAACACGTCA	TGAGGAAGGA	GCAGCGCAAG	GAGGAGAAGG	AGAACGGCG	CCTCGACCAG	60
CTGGAACGTA	AGAAGGAGAC	GCAGCGCTA	CTGGAGGAGG	AGGACTCCAA	GCTCAAGGGC	120
GGCAAGGCGC	CGCGGGTGGC	CACGTCCAGC	AAGGTCAACC	GGGCCAGAT	CGAGGACACG	180
CTGCGCCGAG	ACCATCAGCT	CAGGGAGGCC	CCGGACACAG	CCGAGAAAGC	CAAGAGCCAT	240
CTGGAGGTGC	CCTGGAGGA	GAACGTGAAC	CGCCGCCTGC	TGGAGGAGGG	CAGCGTGGAG	300
GCGCGCACCA	TCGAGGACGC	CATTGCAGTG	CTCAGCGTGG	CGGAGGAGGC	GGCCGACCGG	360
CACCCAGAAA	GACGSCATGGC	GGCAGCCTTC	ACAGCCTTG	AGGAAGGCCA	GCTGCCGGCG	420
CTCAAACAAG	AGAACCCCCAA	CATGCGGCTG	TCGCAGCTGA	AACAGCTGCT	CAAGAAGGGAG	480
TGGCTCCGCT	CTCCGTACAA	CCCCAAACTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:677:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 376 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

GTCCATCCTG	AGCTCCATGG	AGAACGCCACC	CAGCCTCGGT	GACCAAGGAGA	CTCGGCGCAA	60
GGCCCGAGAA	CAGGCCGCC	GCCTGAAGAA	ACTACAAGAC	CAAGAGAAAC	AAACAGAAAGT	120
GGAGTTTCGT	AAAAGGATGG	AGAAGGAGGT	GTCAGATTTC	ATTCAAGACA	GTGGGCAGAT	180
CAAGAAAAAG	TTTCAGCCAA	TGAACAAGAT	CGAGAGGAGC	ATACTACATG	ATGTGGTGGA	240
AGTGGCTGGC	CTGACATCCT	TCTCCTTTGG	GGAAAGATGAT	GACTGTCGCT	ATGTCATGAT	300
CTTCAAAAG	GAGTTTGAC	CCTCAGATGA	AGAGCTAGAC	TCTTACCGTC	GTGGAGAGGA	360
ATGGGGCCCC	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:678:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

GAATTTCGGCC	TTCATGCCTA	GCAGGGAGGTT	TTATTGTAAA	GAGGCCGATT	GTACAGAGCA	60
AAGATTGTTTC	TGACACGGGG	GGCTGGGTGG	TGGGACCCAG	AGGCCAGAGC	TGGGTGAAGG	120
ATGAGGGGGTG	GCATGCC	ATCCAGGAG	TGGGCAAGGC	AGGGGAGGACT	AAACGGCTGC	180
CTCCCAGITTC	CCTTCCCTGC	CCCTCATTAC	TGGGTAAGAG	GGAGCCAGGC	TATTTCACCG	240
GATCCAGGAG	AATATAGCAG	GAGACCCCTCA	CCACCCACCA	CCATGCCCA	AGGATAACGGG	300

AGGTGCCCA GTCTGGCTT TGCAGTCGGC CAGCTCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 357 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTGGCC TTCATGGCCT AGTTCTCAC	60
ACATTCCTT AGATCGGGT CAGCTCCAG	120
TGGGCTGAC CCGCCGTAG GCTAGTGTAA	180
CTGTGTTGCT GTCTCTTA^A TTAACCGTGC	240
CTAGTACATA CTGAAGCGAT GGTCAGAGTG	300
TTGAACTCGC GTACCCCGTA GATACATTGT	357
GCAACGTTCT TCTGTTATTG CCTCGAG	

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGGAA GGCGTAGTGC TTGAAATGCA	60
ACCCAGTGTC GAGGTAAAAA AAAACAAA	120
GTGGAGTGAG GGGATCTGGG ATCCAGTGAT	180
TCAGGATCCA GTGGTGGAGGT TTGTTGACAT	240
AGGGCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:681:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCCTAC AAAAATTGAG GCAGAACGATC	60
GAGAAAGTGC AGGAGCAACT GGGAAATGAT	120
AATCCAAGAT TTAATCAACT ACTGTCTGAG	180
GAGGGGTACT TTCATTGAAT TCCGAAATGG	240
CTGCAGCCAA GAAGAACGCA TTGAGTTCTA	300
AAAGTTTGTA GCAGATCTAC GGAAAGAGTT	360
AGGCCAGATC AGCTTGATG TCTTCCCTGA	406
TGGATGGAAA CTCGAG	

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

GAATTGGCC	TTCATGGCCT	ACCTTCTAG	GTGTCATCTC	CTTCCCTCCC	TTTCCCCCAA	60
GACTCCCTCT	GGGCCAGCC	AGCAGGTGAA	GCCTGACTTA	GGGAAGGGGG	GATTCCAGG	120
GGAGGGGGCC	TGGCCCCCAC	TGACCCAGCA	TTGCTATCCA	CAGGAGGAGC	AGCCCCACA	180
ACATCGATCC	AAGAGGGGGG	GCTCAGTGGG	CGGCGTGTGC	TACCTGTCGA	TGGGCATGGT	240
CGTGTGCTC	ATGGGCCTCG	TGTTCGCCTC	TGTCTACATC	TACAGATACT	TCTTCCTTGC	300
GCAGCTGTCC	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

GAATTGGCC	TTCATGGCCT	AATTGAATT	TAGACCTGCC	TCGGCCTCCC	AAAGTGCTGG	60
GATTACAGGT	GTGAGCTAGC	ACTCCAGCC	GACAGGTGCT	TCTTAAATGT	TTTCTTTGAG	120
CAGGAATTGG	TCCAGGAATT	GGTTCTCAAG	TTAGAAGGAA	AATTGAGGG	GAAGAACTTG	180
TTTTTCTCC	AATCAGTCTC	TGATTTAAATA	GTTATTAGGA	AAAACCTCTT	GCTTATGTCT	240
TTGTATTGCA	CATTTTTATA	TATGTATATA	TGTGTAAATA	GAGATATTAA	TATATTACCA	300
GACAAACACG	TGTATGCACA	TTTCACAATG	GAGGAAGAAG	GGATATGGTG	TGCACTGAGG	360
TAAAGTGAGC	AGGGATACAG	AAGAGAAACT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 509 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

GCTCTAACCT	TGGGTCCAAG	TTTCGTTATA	GTGGCAGGAC	ACAAGCGCAA	ACGAGAAGAG	60
CCAGTGCCTT	GATAGATCGC	CCAGCACCTT	ACTTTGAACG	CTCATCCAGC	AAACGTTATA	120
CCATGTCTCG	CAGCTTGGAT	GGAGCATCA	TGAATGAAAA	CCATGAATA	TACATGAAGG	180
ATTCTATGTC	TGCTGCAGAG	GTTGGTACTG	GCCAGTACGC	CACAAACAAA	GGCATCTCTC	240
AGACCAACTT	GATCACCAC	GTGACTCCGG	AGAAGAAGGC	TGAGGAGGAG	CGGGACGAGG	300
AAGAGGACAA	ACGGAGGAAG	GGGGAAGAAG	TCACGCCAT	CTCGGCCATC	CGGCACGAGG	360
GAAAGACTGA	CAGTGAGCGC	ACGGACACCG	CAGCCGACGG	GGAGACCAAC	GCCACTGAGT	420
CGGACCAGGA	GGAAAGATGCA	GAGCTCAAGG	CACAGGAGCT	AGAAAAAAACT	CAAGATGACC	480

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

GAATTCTGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GGCGTGAGCC ACTGCGCTG	60
GCCTCTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTC CTGGAAAAT CCTACTCATT	120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCTT AAGCAGAGAG GGTCTTGCTT	180
TTGGGTGCTC CACAATTTG TGCAATTTTT CTGTTACATC ATTTATCTTT TGGGGATTGT	240
TTATTTCTCAT ACTTATCTCT CTTCCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTA	300
CCTTTCTGC AGCACCTTAC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT	360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGCTGCG CTTTGCTTTT	420
CCTTNACCC CCCACCTCGA G	441

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

GAATTCTGGCC TTCATGGCCT AGTTGGTTTA TGTTATGTAA AGTTATGTAG TTATGTAAAG	60
GTGCTGAAAT GTCACTCTTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC	120
AGGAGAGAAA TTCTCCTGAT GGCTTGAAG AAGCAAACAG CCACCTGGTT AACCCCCCTGT	180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG	240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG	273

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

GAATTCTGGCC AAAGAGGCTT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG	60
AGAAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTCCCT	120
CGAG	124

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

GAATTCTGGCC	AAAGAGGCCT	ATGCCATCTT	AGTCCCTCTT	CCCAACCCCA	TTTTTAGTT	60
ACTTTCCTTT	CATTAATAATA	TCTCTTATGCA	CTTACAAATA	AAACTAAGTC	CCAAGAGGGC	120
AACAAAATAT	AAAGATTCTTA	ATGATACAAA	AACAAATCTT	TCTGATACTA	GATCTTTTAT	180
ACTAGAAAAA	TAATTCTTG	TGCTTGAACA	TCATTTTAA	GCACATTAGTG	AATTGAGAAT	240
CTGAAC TGCC	ACTTGAATA	TTCCC GGAA	AGAAACATTA	TGAACCAAAT	GAAGGAACAT	300
AGCTATTCAA	AGGGACATAT	TTTTGTACTT	GT TTTGCTCC	AATTCTGCT	ACATAGACTG	360
CTCCAGTCTT	TCTGTCGACT	CTAGGAGATG	CCTAAACCGT	CGATTGAATT	CTAGACCTGC	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

GAATTCTGGCC	AAAGAGGCCT	ATAGTTTTT	CATGTTACAT	CTTTTAGATT	ATTTCTTTT	60
TAATCTATCT	TGACTATAT	TTAAAGTCAA	TTCTTGTTT	TTCCCTTTCC	TTTTGTGGG	120
TAACGGGGTC	TGGCTGTGTT	GCC CAGGCAG	ATCTCAAAC	CCTGGGCTCA	AGCTGTCCTC	180
CCACCTCTGC	CACCC TAGGC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

GAATTCTGGCC	AAAGAGGCCT	ACGTTGATTG	AGCACTGAGC	CCTTACTACG	TGCTAGGCAT	60
GGTACATGCA	TGGCCTTATT	TAATCCTATC	AACCCTCGAG			100

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

GAATTGGGCC	AAAGAGGCCT	ACATCATACA	AGTCGTCGTA	AAGCAAATCT	GAGCTGTTGT	60
CATTGGAAGG	CACTTTAGTT	TTGATGCAGT	ATTCCGCCAG	GGTTGTGGGG	ACCTTCACTC	120
CATCCTTTTC	TGCTTCGGCC	TTAGTGGCTG	AAACTTGTTT	CCTAATAATT	TCACCATATT	180
CTTTGTCTT	TCCCTTACTG	TCTCTCCATT	TCCTGAACAT	AACTGAAGCA	TCGACATTGG	240
CTGGGGAGAA	GGTGTGGGC	TCATTAAGCA	GTGAGATTAC	ACTTAATAGG	ATAGTCCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

GAATTGGGCC	AAAGAGGCCT	ACCAAATACC	AGGCTACCAT	GGTCTACAAG	ACTCTCTTCG	60
CTCTTGCAT	CTTAACTGCA	GGATGGAGGG	TACAGAGTCT	GCCTACATCA	GCTCCTTTGT	120
CTGTTCTCT	TCCGACAAAC	ATTGTACCAAC	CGACCACCAT	CTGGACTAGC	TCTCCACAAA	180
ACACTGATGC	AGACACTGCC	TCCCACATCCA	ACGGCACTCA	CAACAACCTCG	GTGCTCCCAG	240
TTACAGCATC	AGCCCCAACAA	TCTCTGCTTC	CTAAGAACAT	TTCCCATAGAG	TCCAGAGAAG	300
AGGAGATCAC	CAGCCCAGGT	TCGAATTGGG	AAGGCACAAA	CACAGACCCC	TCACCTTCTG	360
GGTTCTCGTC	AAACAGCGGT	GGAGTCCACT	TAACAACACC	GTTGGAGGAA	CAAGCTCGG	420
GCACCTCTGA	AGCAGGGCTG	GCAGCTACAC	TGTCGAGTC	CGCTGCTGAG	CCTCCCACAC	480
TCATCTCCCC	TCAAGCTCCA	GCCTCATCAC	CCTCATCCCT	ATCAACCTCA	CCACCTGAGG	540
TCTTTCTGC	CTCCGTTACT	ACCAACCATA	GCTCCACTGT	GACCAACCA	CAACCCACTG	600
GAGCTCCAAC	TGCAACAGAG	TCCCCGACAG	AGGAGTCCAG	CTCTGACAC	ACGACCCCTCG	660
AG						662

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

GAATTGGGCC	AAAGAGGCCT	AAGCCCCAA	AACACGCTCT	TTTGTGCTC	CCCTCAAATC	60
CTTCACAGTG	TTCTTCCATA	TCCACTCCTT	CCAGGAAGCA	TGTTCTCACT	ACCCCAGTTC	120
ATGTGGTTT	CTTCCCTCTC	AGAATTCTA	TCATGCCCT	ATAAGTTTAG	CAATTGTCC	180
TTCTCTAATT	GTTCACATC	TGTCCATCCG	ATATCCCAGG	AGGACTGTCA	GCTCTATGAA	240
GGCAGGGTT	GTCTTCTCCTT	TACCATGCCT	ACCATGCCTT	ATAGTGTAA	AAATTAAACC	300
TACCCAGAAA	TGTTTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCCTACTT GCTTTTCTT AGCATATAAA	60
AGTCACAAAG TTTTACTCAT CTTTTTAAAAA AACGAAAACA TCCTTAGACC GTGCTCTCCA	120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA	180
TACAATACCT GCTGCTCTGC CTTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG	240
CTTATAACAAT ACTTGCTGTC CTGCCCTCTC CTCTCAGCTG AGCTCTGG AACATGCTTT	300
TTATACAATA CTTGCTGTCC TGCCTCTTC TCTCAGCTGA GCTCTCTGGA ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:695:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 225 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

GAATTCGGCC AAAGAGGCCT ATGGGTTTT AAAAATTTG TTTTTATTTT TTCCCTTGAT	60
GTGCGAGGGC TGTTTACTTT GATGCAGTCT CACTTGTTA TATTTTATTT TGTTGCTGGC	120
CTAGGCCCTCT TTGGCCGAAT TCGGCCAAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT	180
GCAGTCCCGAG CCACCGGGAA GACCGAAGCG GGAGGATCAC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:696:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

GAATTCGGCC AAAGAGGCCT ATCCGCTTCT GTTGCAGCTG GCGGTGCTCG GCGCGGCCGT	60
GGCGGCCGCA GCCCTCGTAC TGATTTCCAT CGTTGCATTT ACAACTGCTA CAAAATGCC	120
AGCACTCCAT CGACATGAAG AAGAGAAATT CTTCTTAAAT GCAAAGGCC AGAAAGAAC	180
TTTACCCAGC ATGGGACTCTA CCTACCAAAC AACTTCTGCT CGTTGTGCCT TCAAACAAATG	240
AAGAAAAACCG GTGCTCTGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA	300
AACGAGACCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:697:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTCTGGCC	TTCATGGCCT	ACAGAGTGTG	GACGGCCAC	TGGGTTGGTG	GTGGTGGGTG	60
CCCGTCACAG	GGCTGGAGGT	GTGGCCGGCC	CACTGGGTG	TGCTTCTGC	CGTACGTCCC	120
TTCCCATGAG	GATGAGATGA	CCCATCTGTT	GCATCCCGC	TGCTGATAAA	ACAAGACCT	180
CGGAGCCAAG	AAACAAACACT	GAGTCCAGA	TTTCGGAAG	TTCACAGTG	TTGCCGACAC	240
CCTCTCCCAA	CTGCAGACAT	CCTCCCTGGA	GGACCTGTC	TGCTCACATG	CCCCCTGTC	300
CAGCGAGGAC	GACACCTCCC	CGGGCTGTG	AGCCCCCTC	CAGGCCCCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCTGGCC	TTCATGGCCT	AGATTGACAG	AGGTCAGTTG	TCACCTCTTG	CCTCTCTCCC	60
CTTCCAGCAA	CATGTATAAT	CCTGTGAGTG	TTTCTTCAGC	ACCCCTCTCT	GTTGTTTACA	120
CTACTGCAAG	AGCCTCCCTA	AGTGGTCTGC	CTGTTTCCAC	CCTGTTGTCT	TGGAATTTAG	180
TTTTCTCGCA	AAAGCCAGAG	AATGTTTCA	GAAGGTAGCT	CTTGAGCAAC	TTCCCACTTT	240
CTTGGAGGG	AGATCCAGCT	CCTCCAAACAA	GACCAGCAGG	CCCTGTGCG	GCCTGGCTCC	300
TGTTCACCCCT	ACAGTCTTG	GTCAGGCTC	ACGGCTGAA	TATGCCGAGC	TCTTCCTTGT	360
CCTGGGGCCT	TTGCACCTGG	CTTCCTCTG	TCCAAAATCA	TCTTCCTGTA	GCTTTGTGCT	420
TGCCTAGCTC	ATCATCATAG	CAGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GAATTCTGGCC	TTCATGGCCT	ACAGAGAACT	GAGGAAAACC	AACTACGTGG	AGAACATCTCAA	60
AGAAAAAAAGC	GAGGGAGAAAG	CTTCACTGTA	TGAAGATAGA	ATAATAACAA	GAGAGAAGGA	120
CATGAGGAGA	GTGAGAGATG	AGCCCGAGAA	GGTGGTGAAG	CAGTGGGACC	ATAGTGAGGA	180
TGAGAAAGAG	ACAGATGAGG	ACGATGAGGC	TTTTGGGGAA	GCTCTGCAGA	GCCCAAGCAAG	240
CGGAAGCGAG	AGTGTGAAAG	CAGGAAAAGC	CAGAAGCGAT	TTGGGAGCAG	TTGCCAAGGG	300
CCTGTCAGGA	GAATTAGGCA	CAAGATCAAG	AGGGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCCGGCC	TTCATGGCCT	AAGCCAAGCA	AGGCTGTACC	TTTAATTACT	GCTGCCCTCA	60
TTTGCATCTG	GCTGCCCTCA	TTATAGTGCT	ATTAGCAGAG	TGCAGGGGTC	CTCCCTGCTGG	120
CCCATCGGGA	GTGGTGCCTG	CACAGTTGTC	GGGCCTTGCT	TTGGTGGTCT	TTGCTGCCCT	180
CTGGGCAAAA	TGAAGGATTT	GGAGTAGACA	GCAAGCAGGC	ATACATCCTG	GGCCAGAACG	240
AGCCTGCGGA	GCTCATCGTG	GCTTGCCCTA	AATTGTTCT	CAACAATAAA	GTTGTTGAAA	300
AACAATTGT	GTTTCTTTC	CCCTTATTAA	AAACCCAAAA	TTATATTCAT	TATAGAAAAT	360
TAAAGAAGAT	AGCTCTCGAG					380

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCAGCCCTCCC	AAAGTGCTGG	60
GATTATAGGC	GTGAGGCCACC	GCGCCCAAGCC	AAAATCTAA	AGATATTGAA	AAGATACAAA	120
GGAGCACATT	ATGAACATT	TTTCGATTC	ACTGAGTATT	TTATAACTGC	ATCATTGATT	180
TTAAAAGAAT	TCATGACTTT	GAAAACTAAT	ATTCTACAAA	GTAGCTTTG	ATTTAACATG	240
AGATTTATA	TATGTGCTTA	TCTTGGTTCT	CTATGAAACC	CCATTGAAAT	AAGAAAATGT	300
AAACACCAGC	CAACTCGAG					319

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCCGGCC	AAAGAGGCCT	AATAGTCAAG	ACCTTTGCAG	TTTGATCAC	AGAAAATATGA	60
AAGATTACAC	AGCTACAGT	ATATGAATGA	AAAAAGTGAC	AGCTATGGAT	TTTTAAAGTT	120
ATAAGTTGCT	ATACTACATA	TATGTAATGT	GTGTGTGTAT	AGTGTGTAGG	TATATATATT	180
TATATTTATA	CACACACTAT	ACATGTATT	AAAAATATTG	AAAATCCAGA	ATTATTTTAT	240
GGTAAAAAATT	ACTAAAATTG	ACCTCACATG	CTGAATGAAG	AGAGCTTGAG	TAGACCAACA	300
AAACAATGAA	AAATTAAGAC	GGTTAGAAGA	TACGCTTCT	AAAAGAATAC	ATTAGAAC	360
TAACCTTAAA	AAAAAAAAT	CCTACTCTCC	TGAGCCAGAG	TGGTCTCAGA	GAGACTCCGA	420
GAACCTTAATT	TTTACAACT	AAAATCTTG	AAGAATTGGT	AATTGCTAAA	TTTTCCAAC	480
ATACTATTCT	ACAAGACTAA	CCTAAACTG	ATTATAAGAA	CTAGGTGAGG	AGGGCCGGCA	540
AAACTCGAG						549

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

GAATTCTGGCC	AAAGAGGCCT	ATCGAGCCAC	TGCACCTGGC	CGATGTGTT	TGTTTGAAAT	60
CTTACTAAA	AGTATTGAA	GAGTTGTGA	TAGTTGTATG	GATATGTCTG	TAGTAAACAG	120
AAACAAATTG	CTTCAGTTTC	TCTTTACTTA	TTTTCTAGGT	TACAGTACCT	TTACCAAGCAT	180
CCCAGCTTTC	CTTGCTTAAT	TTGGATCTA	CAGGGCAACC	TCTAATTGCT	TTGCCCTCAGA	240
CTCTTCAGCC	CCCAATTACAG	CATAACCACTC	CCCAAGCACA	GGCTCAGAGT	CTGAGTCGTC	300
CTGACAAGT	AAGCCAGCCT	TTCAGAGGAT	TAATTCTGC	TGGAACACAG	CATAGCATGA	360
TTGCAACCAC	CGGAAAAGTA	AGTAAAGAGA	CATTGCAACA	GGTTATTGTA	GAATTAAAGG	420
TAGTGTGTT	AGATATATGC	ATCTGTGTTA	TCTAAAAAAC	TAATATGCGT	CAGTTTTTAC	480
CACCCCTGCAA	AAATCTCAA	CCCCAGTATA	TTTACATT	ATCTATTAC	TTTTAATGTG	540
TTTGGCCCCA	TCTAGTTTT	ACCTAATAAC	AAAGAATTCA	CAAATTATT	GGAAGAATTG	600
GATTATAGT	GTCTCTTCGG	CTTATTTAAT	TATAAGTCTG	TTTGGTCAGG	TAATTCCATA	660
ATACTTGAAG	CCTAACTATA	GGAGTTTTGT	ACTAAGGTT	TTTGCCCTT	CCTAGATTAC	720
GTCTTCACGT	ATAGGACATG	AAACACAGC	AACTCGAG			758

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 663 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

GAATTCTGGCC	AAAGAGGCCT	AAGATGGCCT	TCCCATGTTA	TGGCTACATG	GCTGTGATAA	60
CAAGTAGAGT	TATGTGCTG	CGCTCTAAC	TCACTGAGTC	TTGCAAGGATG	AAACATCCT	120
AGCTCAGCCT	ATCCTTGACC	AAAGCACANT	CATGCTCCTT	ACAAACTCCA	ACCAGCCTGC	180
ACACTGGGAG	GAGCGCGTGC	TGGGCTAGAG	CCACAGAAATT	TTGTACCGTT	GGCAGCAGGG	240
AGGAGCCTGG	CCCCCTCTTT	CCTAGGTAGA	ATCTGGAATT	CAATCTGTGA	GGTGGGAAGC	300
ATATACTAGG	AGGACTTTCA	CTCTGCTGAG	TCCCTGTTCC	CCCTCCCTTT	TTTTCCCTTT	360
TTGCCAATA	AAACCCCTTA	TTCTCACACT	TCAAATTGTC	TGTGAGACTA	ATCTTTGTG	420
GCCATGTGAC	ATGGACCTG	TCTGTAGCTG	AAACTAAGAA	AAAGCCCTC	CCGCACAGTC	480
TGATGTTTCC	TCAGTCAGAC	ACTGCAAGCT	GTGATGTTGG	GGTGAGTACA	GGATATTG	540
CAATATTGCA	AGACAGTTT	GGCTGTCAGA	GAGGAAGATG	CTGTATGCAG	ACACACTTGA	600
CAGCAATAAC	TTAAGGCCAC	CCTGAGACTG	ACTCTGCATG	GTGATGCACC	TGAAGGCCTC	660
GAG						663

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

GAATTCTGGCC	TTCATGGCCT	AGAGCGATGT	CAAGTGATCT	GCCCGCCTCA	GCTCCCCAAA	60
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GTGGTGGAAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCCATT TTTTAATTAA	120
GTAATTCTAA CCTAGGTATT TTTCCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA	180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAACACAA CCTAAAAACC CAACTTGAGC	240
AGGTTTAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA ACAAAATAT	300
GTCGTAAAAA TAATCATGTA GAAACTGGCT CGAG	334

(2) INFORMATION FOR SEQ ID NO:706:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

GAATTCCGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTCCCT CCTTCACTGTC	60
GACGCTTGTC CTCACTTCCC AGGTGAGGAG TCTAAGAAA CAGCCTTCC ATCAGCCCT	120
GTCGTGACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTAC AGGGCAACCC	180
AGTTTGCTC CTCTGCCTT GAAATTGTT CCTCCCAGAA ACTGTCCCTC ACAAGGCATG	240
AACAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGCTGCAGAA TGAGCTGTGG	300
AGTGCCCGT CCGGAGTCCT GAACAGCTTC AAACTTTCC CCTTTAGAAA TGCCTAACAC	360
GCCCTCGAG	369

(2) INFORMATION FOR SEQ ID NO:707:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 365 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

GAATTCCGCC TTCATGGCCT AGGCATCCTT GGTGGCGAT CCTTGGTGCA TTATATCAGG	60
AGGCAAATGA TGTTGGTTTG TCCCATTGTT TGTAATGTA ACATTGGTTG CTTGGTTAAG	120
GTGAAGGGTG CCAAGCTTCT CCACTGTAAG GTTCCATTGTT TTTCCTCTGT AATTAATAAG	180
TAATTGTTAT GATACTTTGA GATAACAAAG TAGACTGTT ATCAAACATT CATCAATGAA	240
TTAACATCC AAAGACGCT CAAGAATGAT CATCAAAGC AGCCTACTAA TGACTGTGAT	300
TTACCATTTA ATACATTTCA AACAGTGCAC GTGCTCTGT ACATATTCTG GGAAGGAATC	360
TCGAG	365

(2) INFORMATION FOR SEQ ID NO:708:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 436 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

GAATTCCGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA	60
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GAGCAAAGAG CATGAGAAGC TGATGGAGGG AGAACTTGA GCTTTGCGGC AGGAATTAA	120
AAAGAAAGAC AAGACGTTGA AAGAGAAATTG CAGAAAGTG GAGGAAGAAA ATGAGAAATCT	180
CCGAGCAGAC CTACAGTGTG TTCTACACA ACTGGAAATCC TCTCTCAACA AATACAACAC	240
CAGCCAGCAA GTCATCCAAG ACTTGAATAA AGAGATAGCC CTTCAGAAGG AGTCCTTAAT	300
GAGCCTGCAG GCCCAGCTGG ACAAAGCTCT GCAGAAGGAG AAGCACTATC TCCAGACTAC	360
CATCACCAAA GAAGCCTATG ATGCATTATC CCGGAAGTCA GCGCCTGCC AGGATGACCT	420
GACACAAGCC CTCGAG	436

(2) INFORMATION FOR SEQ ID NO:709:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

GCTGCTCTAT ATCTTAGAGA AAATAAAAGA ACCACATGTT GCTTCCCTGC CTGCAAGCTC	60
TTCTGAATTC ATCACCATTC ATGTTCTTC CTTCAAGGGGA AATGAAGGCA GATTGTTCTG	120
TTGGTGCTCA CAGATCTCTT TCTGTTCTGA TACCTCTTC TTCCCTCTCT GCTTCTTTCC	180
CTTCATCATG TGCTCCCTATA CAACTCTCTC CCAACTTTAA AACAAAAAACAA AACCCCTCCC	240
TAATCTTGT GTTTGTTCCA GCCATTAGAC TGTATCGTC TTGCCATCCA CGTTATTGGA	300
AGAAGGCCAC CTCACCTCTA CTCCCTTTCT GCCCTTCCC TCTTAATCTG CTGCTCTG	360
ATTCTGCC CCACAAACTC GAG	383

(2) INFORMATION FOR SEQ ID NO:710:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 496 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

GAATTGGGCC TTCATGGCCT AGGGGCTGA AGATCTTCGG GTATTTGGCT CCCAGAACCT	60
GACCACAGTG AAGCTAAAAG GGGTGGGTGA CAGCTTCAG AAGTATCCTG ACTACGAGTC	120
CAAGGGCATC AAGGCTCACT TCAACCTGGA TGAGAGTGGC GTGCTCAGTC TAGACAGGGT	180
GGAGTCTGTA TTGAGACAC TGTTAGAGGA CAGCGCAGAA GAGGAATCTA CTCTCACCAA	240
ACTTGCAAC ACCATTTCGA GCCTGTTGG AGGCGGTAC ACACCAAGATG CCAAGGAGAA	300
TGGTACTGAT ACTGTCCAGG AGGAAGAGGA GAGCCCTGCA GAGGGGAGCA AGCACGAGCC	360
TGGGGAGCAG GTGGAGCTCA AGGAGGAAGC TGAGGCCCA GTGGAGGATG GCTCTCAGCC	420
CCCACCCCCCT GAACTAAGG GAGATGCAAC CCCTGAGGGA GAAAAGGCCA CAGAAAAAGA	480
AAATGGGAA CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:711:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GAATTCTGGCC	TTCATGGCCT	AGTATGGAAG	GTGGAACTAA	AACTGAAATG	ATCAGTTCAC	60
ATATTTGTA	AACTGGTATT	TTATATCACT	CGCTGGATTA	GGCCCTAGA	GACAGTGTG	120
GCTAAGTGAT	AAAGTCTTG	CGCTTGCGC	ATTTTATAGT	GTAGTGGAA	GACAGAAAGC	180
AAACAAGTAG	AGAACATAT	ATGTAATGTG	ACCTCAGGTC	CAGCTAAGCG	CCAGACAGAA	240
CAAAAAAGTA	AGGTGAAGGT	AGAGGGGTG	GAGCAGCAGG	AAGGTGTTAT	TTTAGGTAAA	300
GTGGCCAGGG	AAAGCCTTT	GAAGAATTGA	TATCGATTCC	AAAATGATGA	GAAGGTGCAA	360
TTGTGCCACC	ATGGAGGAGA	AGAGCTTTCT	AGGCAGAGGG	CAGGTGCAA	GATGGTAGGA	420
ACAAACACGG	CTTGTGAAA	GAACAGCAAT	GTGAGGAA	TGAGCCAGAC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCTGGCC	TTCATGGCCT	AAACCTCAT	CAATCTCTGC	CAATCACTGA	60
GCCCCAAACC	ATTTTCACTT	TGTTTTAGGT	ATTTATAATA	ACAGCACTCC	120
GATCAATTTC	CATCTTCAGC	GGTTCAGGCT	GCTTTAATAA	AGTCCATAA	180
TTTTAAATAA	CGGAATGCAC	ATCTCACAGT	TCTGGAGGCT	GGAAGTCCAA	240
CCAGCATAAT	TGGTTCTGG	TGAGAGAGCT	CTCTTGGGTT	TCAGACTGCT	300
TGCAAGCTTCA	CATGGTGGAC	AGAAAGAGCT	CTCAAGAGTC	ATTTTTAAGG	360
AATTATGAA	GCCTCCACCA	TAATAAGCTA	ATTCTCCC	AAAGTGTGA	420
GTCAGGCCACC	GTACCTGCCT	GGGAATTTTT	TTAAAGCTA	ATTGGATAA	480
GGAATATATT	CATCTATCAT	ATAGAAAAGA	ATATGTGTC	GAGGCCAGGA	540
ATATTACCTT	ATTATACTG	TTTTAATTAA	AACTGTGATTA	ACTCTGGGAG	600
AGCTCGAG					608

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCTGGCC	TTCTTGGCCT	AGTGCACTCC	TGTAATCCCA	GCTACTCGGG	60
AGGAGAAATCA	CTTGAACCCA	GGAGGTGGAG	GTTGCAGTGA	CCCAAGATCA	120
CTCCAGCCTG	GGTGACAGAG	CGAGAACGTC	TTTAAAAAAA	TTAAAAAAA	180
TTGCACAAAT	CAGACAGTGA	CCCAAGAGCTC	AGCCTTGAGG	AAAGTCAGTG	240
GAGGGCAAAG	AAGCAAGTAA	AGGTTTAGCA	GACATGGCAC	CTCAGTCTGG	300
GGGCTAGGCA	CAAAGGAAGG	GGAACATGTC	AGATGAGAAA	CACGTGAAGG	360
TGAGCAAGGA	AGGTTGGTTA	GAAAGAGGAG	CTGCTGGTGT	GGCTCCTGTG	420
GATAGGGCAC	GATAGAGTCA	GGCAGTTAGA	AGCCAAGCTG	AGGAATCGAC	480
ATAGGTAAGT	AGGGGAACCTT	GAGGATGTTT	AACTCAGAAAT	GAGATCTCGA	531

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

GAATTCGGCC	TTCATGGCCT	AATTTATCCC	ATCCTTATCC	CATCCTTATA	AGGAATAATG	60
TATTGAATAA	AGATTGTATC	AGTATTGTAA	ATTCAATAAA	CCAGAACCTG	TGGAAATAAA	120
TATGTTAGGAG	ACATAATAT	GGTGTCCTCA	AATTGAATTA	TGTGGAAAAA	AAGTGGGGTG	180
GAGTTAAAGT	CCAAGCCAAT	AAACTTGTAA	CATTAAAGAA	AGACAGGTAT	GGGATGCAAG	240
GTGCAAAGAA	AAGGTATCA	TATCTCATAC	TGGGGTGAGA	TAGAAGACTT	CCTGAAGTAG	300
GCGATGCCTA	TATTGAATCT	ATAAGGACAA	ACTGGCATCA	ATATGTCAGG	GAAGACAGGT	360
TGAAGGTGGT	CCTGCCAGAG	AAAGGAGCAA	GGATAAAAGGC	AAGGAAGCAT	CTAACGTAAT	420
TGTTTGTGGA	GAACACCTAA	ATCGGCTGAG	AAAAAACGAC	TCAGGTATGT	AGTAGGGCAC	480
AGTATAAGTA	GGTCTCGAG					499

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

GAATTCGGCT	TCATGGCCTA	GAGATTTAAT	GTTCCCTTAC	CTTGCTGGAG	GAACATCAAT	60
GTTGGAGGAA	ACAACTTTC	TTTTTGCTC	AAGGAGACAG	ATGGAGCGAG	TGTTTTCTTT	120
TTCATGGTCA	AGGATCCGGC	TGGCTTTTT	GGTGTCTGCT	GTTTTCACAT	CTTCCTCCAT	180
GGCCAAGGAA	AAACACGTGTT	GATGAGACAT	TTTTTACCA	CAGTCACGTT	TTAACTCCTC	240
TGACTGAAAT	GTGAAGGTCA	TTTCCCGCTT	AATGCTCCCC	ACCTGTGAAA	TGAAACACAG	300
AAATTCTTAC	TCACATAAAA	CATCACCTTT	GTACGACTAC	TGCAGATGGC	GGTGAGGAGA	360
GATTACAGAC	ACTGTCCCTC	CTGTTCATCT	GAAAGATTGT	ATAATTTAA	TAAGAAAAAT	420
GCAACTCGAG						430

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

GAATTCGGCC	TTCATGGCCT	AGACCTTCTG	GGTGAACGAG	GGCAAGGCACG	CCAAGTTCCG	60
CTGCTACGTG	ATGGGCAAGC	CCGAGCCCGA	GATCGAATGG	CACTGGGAGG	GCCGCCCGCT	120
GCTCCCGGAC	CCCCGCCGCC	TCATGTACCG	CGACCCGAC	GGCGGCTTCG	TGCTCAAGGT	180
GCTCTACTGC	CAGGCCAAGG	ATCGTGGGCT	CTACGTCCTGC	GCGCGCGCA	ACTCGGCGGG	240
CCAGACGCTC	AGTGCCGTGC	AGCTGACCGT	GAAAGAGCCC	CGCCTCCGGT	TCAACACGGCC	300
CCTGCAGGAC	GTGGAGGGCC	GTGAGCACGG	GATTGCCGTG	CTGGAATGTA	AAGTACCCAA	360

CTCCCGCATC CCCACGGCCT GGTTCCGTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA	420
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G	471

(2) INFORMATION FOR SEQ ID NO:717:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCTGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTCTTCC AAATTATGCC	60
TTGAAGCTGC TCCCAGGCC ACCCGCTCAT CAGCACCCCTG CTCCTGTGGT CCTTCTCGTG	120
AAAGGCAGAC GGGAGATGCC TGTTGCCCGC AGTCTTCTCT GCAGCTGCCG TGGGAACAGG	180
CACCTTCCCAG CTGCTGCCGG ACACAAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTCCA	240
GATCAGCAA CTGCAGAACAA TTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACAA	300
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA	360
CACGAGGCTC CCACAGACCG CCTTCCCCCA GCTCGAG	397

(2) INFORMATION FOR SEQ ID NO:718:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 539 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCTGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTTGTATGG	60
CAAATTCTTG TCTTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA	120
GTCATAAGAT GGGAAAGAAA AACTTACAAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG	180
TGTGTGTAT GCTTATATGA AGGTACTCTA ATTATGGTA TTAAGAGAAA ATGAAACCCC	240
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAGTGACA CATCCCTGTA GTCGCAGCTA	300
CTCAGCAGGC TGAGACAGGA AGATAACTTT AACCCAGGAG TTGGAGGCTG CAGTGAGCCA	360
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAATGA	420
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG	480
CCTTACAGTG CTGGTGTCTT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG	539

(2) INFORMATION FOR SEQ ID NO:719:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 387 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCTGGCC TTCATGGCCT AGGCAGTGGG TAATTGTCTT CTGGAGGAAC CATCTGTGAC	60
ACATTCTACA TGGTTCCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCCCTAGC	120

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTCCCT CCTTCCTCT CTCAGTCTCT	180
CTGATCCTTC CACCTGTGCT CTGGGTTAACCTCAAGTA AACCAACTGC ACACAAGTCC	240
CTGTCAGG CTCCATTGGA GAAACCAAA CTAAGACACC ACCTCAAAAC ACAGAATTTC	300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAAGT	360
ATATTAATCC TAGTTATTAA ACTCGAG	387

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

CCCGTGTATA GTTTGCAAAT ATTTTCTCCT CTTCTGTAGG CTGTTTACTC TTGTTGATAG	60
TTTCTTTGCA CATGCACAAAG CTTTTGGTT TAATTAGATC CCATTTGTCA ATTGTTGCTT	120
TTGTTGCAAT TGTGTTGGC GTCTTCATCA CGATATCTT GCCAGTCCT ATGTTCAAAA	180
TGGTATTACC TAGGTTGCC TCCAGAGTTT TTATAGTTT GGGTTTTAT TTACTCGAG	239

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CCTCCTTACC CCCGTAAATC	60
TCCCAGGTAC ACTTCCTGAT CACCCCTCCGG ATACCTCATC CCTATCTATT CCTTTTATAA	120
ATAATTCCTT GCTCCCTCTT CTCACCCACA ATCCACTCCG AGTTCAAGGC CTCACTGCCA	180
TCGACTCCAC TGCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTCACGC	240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCTGTC CCTGGAGCTC	300
CCTAGGCCAT GAAGGCCAA TTC	323

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

GAATTGGCC TTCATGGCCT AGGCTGTGG AGCCCCAGCT CTGGGTCCT AGCCCGGGTC	60
CAGGCAGCCA GGCTCCCTC TGAGCTGAGA AACGGAACCT CGCGAACAC TGTTGGCACA	120
TCCTTCTCCT CCCCCGCCCC TGATCACCCG CCCCCGGATC AGAAATATAT CTATATTCTC	180
GACTAAAGTC TCATCAGGAA ATATTCCTG TCTTTTATTT TAAGCATCAA ATTGTTTAG	240
TTGATTTAAA AAGGAAAAAA TACAGACGAC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

GAATTCCGGCC	TTCATGGCCT	AAGAACGAAAC	AATCATATTA	GCTGGGGGAG	GAGGATAGTT	60
TGGTATTTTT	GTAGTTTCA	CAGTGACCTT	TTTAAAAATC	TGGTTAGGCA	AAATATAGTG	120
GATCTTGT	TTGTGCTCAC	TTCATTATGA	TCACAGAAATG	ACCTGGTATG	ATGTTAGTGT	180
TTTATGAGAG	TGTTATGTT	TAACAGGGGA	ACACCGCAGT	CAATTCTAA	CAACACTAAA	240
GTGTCAGTTC	TGTCGTGAC	ACCAAGGGCT	GTTCATATA	ATGTTGAGGC		300
AACCAGGAAG	ACTCGAG					317

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

GGCCTCAGCA	GGTGTGAAGC	GTGTGCTTAA	GTTCGTTGGG	AGGCCTGGCA	TCCCCGAGAG	60
GGAGGGAAA	GGTAACCACT	CCTTGTGGA	GGTCGCCAGG	GTCATTGTCG	TGGATTTGCA	120
CAGTCGGCTG	GGCGGTGCAA	TGGCGGAAAG	AAAAGGAACA	GCCAAAGTGG	ACTTTTGAA	180
GAAGATTGAG	AAAGAAATCC	AACAGAAATG	GGATACTGAG	AGAGTGTGTTG	AGGTCAATGC	240
ATCTAATTAA	GAGAAAGCAG	ACTCGAG				267

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

GAATTCCGGCC	TTCATGGCCT	AAGTCAGTGG	TAAGCCGCAG	CAGTTTCTG	CCACTCGTAA	60
TATGCAATT	AAAAATTAA	AATTGTTGGC	TGCTTGGGGT	CTGGGAGGTG	ACCTGCTCCT	120
CAGCAAATT	TGACTGTATAA	ATTAATGCCT	GGGTCTTCAG	CCTGGTTCTT	TGCTGGCCAG	180
TGTGACAACA	GTCTGTCAAG	TCTCTGGGG	CACATTATAA	TAAACAGATG	TAATCTTTCT	240
CCGGTTCAAG	GTCACTGTG	ATCAGGGGT	ACTGCCCCAG	TAGAACTAGG	AACATCCAGC	300
AAAAGACTGT	TTTCAAAATA	TACAATTAAG	TGAAAAAAAGC	ATGAAGAACT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

GAATTCGGCC	AAAGAGGCCT	AGAGGTTGAC	CTGAAAACA	ATGAAACACA	TGAACACACT	60
TCCGATTTTC	TCCTCGCTGA	TTAGCTTCCCT	GCCTGCTGTC	AGTGCTGGAC	GAAGTGCTAT	120
AACTACTTTA	TGTAACATTA	CAGAACAGCT	CGAG			154

(2) INFORMATION FOR SEQ ID NO:727:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC	TTCATGGCCT	AGTGGGAAGA	TGTGGATGAT	GAGAAGGGAG	ATAGCAATGA	60
TGACTATGAC	TCTGCAGGCC	TATTGTCAGA	TGAAGACTGT	A'GTCTGTGC	CCGGAAAAAC	120
TCACAGAGCT	ATAGCAGATC	ACTTGTTCTG	GAGTGAGGAA	ACAAAGAGTC	GCTTCACGGA	180
GTATTGATG	ACTTCCTCAG	TCATGAGGAG	AAATGAACAG	CTGACCCTAC	ATGATGAGAG	240
GTTTGAGAAG	TTTTATGAGC	AAATATGATGA	TGATGAAATT	GGAGCTCTGG	ATAATGCAGA	300
ATTGGAAGGT	TCTATTCAAG	TAGACAGCAC	GACTCGAG			338

(2) INFORMATION FOR SEQ ID NO:728:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC	TTCATGGCCT	AATTGAATTCT	TAGAACTCTC	CCAGAGAAC	CAGGCAGATA	60
CTGCTCCACA	CCGGTGAGCT	GCTTCTCACC	TGGGTAGTCT	AGGGTGGTTT	GCTCCAGAAT	120
TGTATTCTG	CTTTTCTTT	TTTTAACTTG	GCAGTGGTTA	ACCATTCCCT	GGAGCAGCAC	180
CAGGTAAGTC	AGCTTGATTC	AGAGTCATCT	GCTTTACCTG	ACATGAGCAC	ACGTTGTCAT	240
ATATTGAC	ATGCAGATAT	CATATGTTAA	ACAATATCAC	ATTGTTGAAG	AAAATTACAC	300
TGGAAAGCGT	AAAATATAGT	TTGGATGCCA	TATTGAGTGT	AACTTAATCC	ACCCGATTCA	360
GAACCTTTGT	AGAGTGCCTC	GGAGTCCCTA	TTTGGAAATA	TCAGTTAGCA	GTTTAGTC	420
GTAGAGACTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:729:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCTGGCC	TTCATGGCCT	AACAAGAAC	ACCAAGTACC	TCGACCTCAA	GAATTCACAA	60
GAGATGCTCC	GCTACAAAGA	GGTCTGCTAC	TACATGCTCT	TTGCCCTGGC	TGCCTACGGG	120
TGGCCCATGT	ACCTGATGCG	GAAGCCCGCC	TGCGCCCTCT	GCCAACTGGC	TCGGTCTGC	180
TCGTGTGCG	TGTGTCTGC	GAGGCCCGGG	TTCGCCCCCTG	GAGTCACCAT	CGACGAAGAC	240
AACTGCTGTG	GCTGTAATGC	CATTGCCATC	CGGCGCCACT	TCCTGGACGA	GAACATGACT	300
CGGGTGGGAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

GAGTTGTCTC	TCTGAATTAA	CTTTCTCACC	AATAGCTCT	CTTTAAGATC	AATAACTCTT	60
ATGTTTGAC	TTTTTAGGCT	ATTTTCTAGA	TCTTGTATGT	GTGTCTTATT	ATTTTTTATT	120
CTTTTTGTCT	CCTCTGTGAA	TTTTCAAATA	GTGAG			156

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

GAATTCTGGCC	TTCATGGCCT	ACTTGAACCT	AGATCTCACC	CCCAGGATGT	TGCGGAGGCT	60
GCTGGAGCGG	CCTTGCACGC	TGGCCCTGCT	TGTGGGCTCC	CAGCTGGCTG	TCATGATGTA	120
CCTGTCACTG	GGGGGCTTCC	GAAGTCTAG	TGCCCTATT	GGCCGAGATC	AGGGACCGAC	180
ATTTGACTAT	TCTCACCCCTC	GTGATGTCTA	CAGTAACCTC	GAG		223

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

GAATTCTGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA	60
GGAAGAGGCA GTTTTCATG ACGGTTAAAA GTGCAGGATT TGGAGTCCA TGTCCTGGG	120
TGTGAATCCT GGCTGTGGCA CTAACTATCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC	180
ACTTTCTTCA TCTGCAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA ACACCTAAC	240
CTTTGGCAC A TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTG C TCTAAAGAGA	300
ATCCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

GAATTCTGGCC TTCATGGCCT AGATTAATTTC TAGACCTGCC TCAGCTCCAC TCCTTATGGT	60
TTGCCACCAT AACCTACAAAC ATTGTCCGT CCACCCACG TGTCTTCCTTC CTTTGTTGGCA	120
GGAACTCTTA TCTCTGCCTA CCAACCAATT GGTCAAGGAGC ATGCACCCCTA GTGTCTCAAT	180
CTCCAGACAT TAACATCCTG CCAAACAACC AGACCATCCA GGTTCCCTTA GTGACCCCTA	240
TCTCATCCTC TTCCACATGC AGTAGGCAGG TCTAG	275

(2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

GCAGATCAGA GGCACGTTTC CCACAACTGC GAAGAGGGCG TGAGGCAATT CTGCAAGAAG	60
ATTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAAGATAAG	120
GCAAGTCCTG CTTTCTTGTG TTTTGCTGG AATGTCAG GCGGGCTCTG AAATGGGAA	180
CTTTGGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTGTA GGAAATTGG CAAAGACCT	240
GGGACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

GAATTCTGGCC TTCATGGCCT ACACAGACTG GGCAATTAT AATGAACAGA AGTTTATTTG	60
GCTCTGGGT CCAGAGGCTA GGAAGTCCA GAGCATGGTG TCAAGCATCA GGTGAGGATC	120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT	180
GGACTCAACT CATCCTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA	240

ATAATGGCAT TAATCCATTC ATGAGGCCCG TACCTCTTT TCTCCCCCG CCCCCCGAGA	300
TGGAGTTTG CTCTTGAGCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTGGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCAATTG GTGAAGGAAG	60
CCTCTGAATT AAAACTTTA AATATTCTG ATTGCAACC AGACGAAAAA GAAGAAAATT	120
GACAACCTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTC CTGGTTTTTC TGCTCTGGTT	180
TTTGTGTTG TTTGTTTTG TTTGCCACA GTTTAGTTCC TCACCTGATC TTTCCTTGTA	240
TCCACTTCAG AGTCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCAG TGCCAGACAC GGGTCTCCTC CGACTGGCG GTGCGTGGGA TGCCGCCAGC	60
GTCAGGTAC TGCAGTGC GGATGTAGGC GATCGAGGCT GACTCGTCGC CCATCAGGTG	120
GATGTGGGA TTCAAGATGG TGTTGTCAC GGGCTTGTCT TTCCGGGACC ACAGGTTTTC	180
AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACACGGCTT CCCAGGGCCT CAGGTTGAA	240
GGCTGTCATG CCAGGGTCGC ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC	300
TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCTCTGTTC CGCACCTTGG TGCTTTCATC	360
CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATT	409

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTGGGCC TTCATGGCCT ACTTTCCCT CCTTCCTCTC TTCCCTCCCT CCTCCCTCCT	60
CTCTCCCTC TTTCTTCCCT CCTTGCCCTC TTCCATCCTT CCCTCCCTCT CTCTCTTCT	120
TTCTTTCTTT CTCTCTCTCT CTCTTTCTT TTCTCTCTCT CTCTGTCTTT CTCTCTCTCT	180
TTCTTTCTTT CCATCTTCTT TTCTTTCTAT TTCTCTTACT TTGATGTAG CTGTCACGAC	240
CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTTAGATT CTCCACCTTC CTGTTCCGT	300
CCTATTACACC AACATGAATT GGTTTGTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG	360

ATTCAGTTGC ATTTTGCTG AGATAGTGCT GTTACCAAAA GCAGGGTGC TGCTTGAAAGA	420
AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG	466

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTG TTATTAGCTT TTTCACTTAA	60
AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGGCATTTG GACTTCTAGC	120
CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTG CAATCTTCC TACGCTCTT	180
TTTCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAT CTAGTATTTG AAGTCCTTAG	240
GTTTGGGGT TGAAGAGTGA AGGAAGCTG TTTTAATGAA AATTCTAAC TGAAGAGAGC	300
GGAGACTTAA GATGCTTAAA TTTGGTCAC ACCTGAGCGG TATTTGTTG CATGGCAGGA	360
GCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTACTTCATG	60
AGAGCCAGCT CAATCTATTTC CAAGCTGGGCTTGGGCTTTC CTCACAACTT CCAAGAGACC	120
ACCTACCTGA AGCCCACCTTT TTGTGACAAAC TGTGCTGGAT TTCTCTGGGG AGTGTATAAA	180
CAAGGATATC GATGTAAAGA CTGGGGATG AACTGTACA ACAATGCAA AGATCTGGTT	240
GTGTTTGAGT GTAAGAAGCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTCCCTG	60
TTCGGGGCGC CCCAGGCCTC TGCTGCCAGC TTCACTCCCGG CCATGGCTC CATATTCCAG	120
TTTGGCAAAC CTCCTGCCTT GCCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG	180
CCCAC TGCCAAACGGC CACCAAGCAGC AGCGCTGGCG ACTTTAGTGG TTTTGGCAGC	240
ACCCCTGCCA CCTCCGCCCC GGCCACCAGC AGCCAGCCA TTCTGACGTT CAGTAACACG	300
AGCACCCCCCG GCCTCGAG	318

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCCGGCC TTCATGGCCT AAGAAATGAA AAAGATTATT GAAACTATGC CAATGACTGA	60
GAAAGTTGAA GAATTGCTGC GTGTACATTAGG TCCATTTCAT GAAATTGTCG AGGACAAAAA	120
GAGTGGCAGG AGTTCTGATA TAACCTCAGT CCGACTGGAG AAAATCTCTA AATGTTTAGA	180
AGCTGAAAGC AGTGACAGTG GAGCCGAGTC TGAGGAAGAA GAGGCCAAG AAGAAGTGA	240
AGGAGCAGCC CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 580 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCCGGCC TTCATGGCCT ATGTTTTAT AGCACCGATG GTACTGTTTT ATTATGGCC	60
AATAGACCAC AACATTACA TCTGTTTTC CTCAAGGGAA CCGTATTGTC TTTGGTTGA	120
AGGATTATTC TATTTGATAC TATCCAGAA ATTGTGAAGC TATAATTCC TGGTTTATAT	180
TTTATGATGGG TTGCTGCTGAT GGTGGTAAA TAAGCTTTT CCTCTCCGCT ACGTCTTTG	240
GAAGATCTCC TGATCATACA TAACTAGGTA GGGCTTATTC TTGCTGCCGG AGCTTGGCAC	300
CCAGCTCTAG ACTGTTTCTT TGAGCATTAC TGAGATTGG AGACGTGTGT GAGAGGAGCA	360
GCGCTCAGAA ATAGGGCTTG AGGCTCAAGC AGAAACTGAA GCTCTCATTC AAATGAAGAT	420
GCTCTCTCTA CGCAGCAGTC GGCACTGAGA AAAGGAGGAT GAAATCCTT CTCATCACAA	480
AGAGCTTGAA GGAACCCACG TCCCCAGATT AGCAACCTC GAGTTCATCT GCTCAGGCCG	540
GGAAATGTGT AAGCTTCCTT GATCAACTCC AGGCCTCGAG	580

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 374 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCCGGCC TTCATGGCCT ACCCAGAGAC TCGCGGACGC TCACGATAAC CAAGGACGAC	60
CGCGAACCAA GGGCAAAATA ACATGGCAGC CAGACGAATT ACACAGGAGA CTTTGATGC	120
TGTATTACAA GAAAAGCCA AACGATATCA CATGGATGCC AGTGGTGAGG CTGTAAGCGA	180
AACTCTTCAG TTAAAGCTC AAGATCTCTT AAGGGCAGTC CCAAGATCCA GAGCAGAGAT	240
GTATGATGAC GTCCACAGCG ATGGCAGATA CTCCCTCAGT GGATCTGTAG CTCACTCTAG	300
AGATGCCGA AGAGAAGGCC TGAGAAGTGA CGTATTCCA GGGCCTTCCT TCAGATCAAG	360

CAACCCCTCT CGAG

374

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

GAATTGGGCC	AAAGAGGCCT	ATTGGTTCC	CTGCTTCAT	TCTTACTCCC	CTACACTCTG	60
TTCTCCAAA	AATAACCATT	Gtgatccttt	AAAATCTGA	CTCTCTCCTG	CTCAGAGTCA	120
TCCAGTGGCT	TCCCATATCA	CGTAAAATGA	AACCCCAATC	GCTCCTTACT	CTGGCCTGCA	180
GGGGCCTGTG	TGATGGGCCT	TCTCCAGCTT	CGTTCTTCCT	TTCCCTCTGT	TCTCCCCTCT	240
GCTTACCTAC	TCCATCTCCA	GGGCTTCTTT	CCAGCTCAAG	CCCTTCCCTG	TTGAGAGCAT	300
TTGCTTCCCC	CAGGGCACTC	GAG				323

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GAGAACAGTG	TTACCAAAGA	AAAGGACATG	TTCAATTTC	AAAGGACCCCA	GGAGGGACATC	60
TCTAGACTTC	GCAGGAAGCT	GGAGACCACA	AAGAAACCA	ACAATGTACC	CAAGTGTGAT	120
GAGATTCTGA	TGGAAGAGAT	TAAGGATTAC	AAGGCACGCT	TGACCTGTCC	ATGCTGTAA	180
ATCGCTAAAA	AGGATGCTGT	TCTTACTAAG	TGTTTTCATG	TCTTCTGCTT	TGAGTGTGTG	240
AAGACACGCT	ATGACACCCCC	CCCCCGCGCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 666 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GAAGATCTTC	GCTGTCCTCT	CTGCCCTAT	CACACAAAT	ACAAGCGAA	CATGATTGAC	60
CACATCGTGC	TGCACCGAGA	AGAGCGTGT	GTCCCCATTG	AAAGTTGCCG	GTCCAAACTG	120
TCCAAATACT	TGCAGGGAGT	AGTTTCCGC	TGTGATAAGT	GTACCTTCAC	CTGCTCCAGT	180
GATGAGAGCC	TCCAGCAACA	TATAGAAAAG	CACAATGAAC	TGAAACCTTA	CAAATGCCAG	240
CTCTGCTACT	ATGAGAGCAA	GCACACGGAG	GAACCTGGACA	GCCACCTTCG	GGATGAGCAT	300
AAGGTAAGCC	GTAACCTTGGA	GCTGGTTAAGT	TGGATCAGCT	GGAACAGATG		360
AAGGAGAAAA	TGGAGAGCTC	CAGCACGAT	GATGAGGACA	AGGAAGAAGA	AATGAAACAGC	420
AAGGCTGAAG	ACAGAGAGCT	GATGAGATT	TCTGACCACG	GGGCTGCTCT	TAACACTGAG	480

AAGCGTTTC CATGTGAATT TTGTTGGACGG GCGTTTCAC AGGGCTCTGA GTGGGAAAGA	540
CATGTGCTGA GACACGGCAT GGCATTGAAT GACACCAAGC AGGTGAGCAG AGAAGAAATC	600
CACCCAAAAG AGATCATGGA AACAGTGTT AAAATGCCCT CCATAGAGGA AAAGGAAAGT	660
CTCGAG	666

(2) INFORMATION FOR SEQ ID NO:748:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGGCC AAAGAGGCCT AACAAACCGAA TATACTACAC GACCTTCCTG CAGCAGTTCT	60
AAGCTACTGT CAAGTATGGA AAATCCCAGC AATTCTGTAC TTGTGTTATA CTGATGTGAT	120
GAAATTAGAC CTAATCACAG TGGAAGCTTT TAAGCTATA CTTTCTACCA GAAGCTTGAA	180
GGGTTTGGTT AAGAATATTG CCCAAAGCAC TGAGATACTA AAGAAATTGA TGACAAACNAA	240
TGAGATTTCAG AGTAACATTG ATACATGATC TTAAACATTG TTTTGTAGTG TATATTACTT	300
GTCCATTCCCT TTAAGGGGAG CAGCCTGCAC TCTTTGTAG ATTACTTTG GGGGATATAT	360
TTTGAGAATG ATGAAACCGG	379

(2) INFORMATION FOR SEQ ID NO:749:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 335 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCGGCC TTCATGGCCT AGGCGCAAGG CCGAGCGTTC CCAGCAGGGG GAGAAACCCCT	60
TCACACCCCCA GGCCCTTCAG GAACTGGGGC CTTGCCTTG AGCCACATGG CCCCATCCCA	120
GTTGGGGAAAG CCAGGTGAGC TCTGACCCCTT GGGCCTGGGC CTCTGCCCTT CCCAACCCAG	180
CCCTCGTCTC CCTCGACAGC GCCCCCTGCTG TCTTCCCCAC CGCAGTCACC ACCACCCGAA	240
ATGCCACGTG GTCACTGTGC ACTGCCCTGT TCATGTGCCT CTGCGGGCA GGGCCTTCCT	300
GGTTTTGTTT ACTGCTGTAC CCAGATAGCC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:750:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 648 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GCAAAGACCC AAGAACTGAA TATGCTCCGG GAACAGACCA CTGGGCTGGC AGCTGAGTTG	60
CAGCAGCAGC AGGCTGAGTA CGAGGACCTT ATGGGACAGA AAGATGACCT CAACTCCAG	120
CTCCAGGAGT CATTACGGGC CAATAGTCGA CTGCTGAAAC AACTTCAAGA AATAGGGCAG	180

GAGAAGGAGC AGTTGACCCA GGAATTACAG GAGGCTCGGA AGAGTCGGA GAAGCGGAAG	240
GCCATGCTGG ATGAGCTAGC AATGGAAACG CTGCAAGAGA AGTCCAGCA CAAGGAAGAG	300
CTGGGAGCAG TTGCTCTACG GCATGAGAAG GAGGTGCTGG GGGTGCCTGC CCGCTATGAG	360
CGTGAGCTCC GAGAGCTGCA TGAAGACAAG AAGCGTCAGG AGGAGGAGCT CCTGGGGCAG	420
ATCCGGAGG AGAAGGCCCG GACACGGAG CTGGAGACTC TCCAGCAGAC ACTGGAAGAA	480
CTTCAAGCTC AGGTACATT CATGGATGGA GCCAAGGGCT GGTTGAAACG GCGCTTGAAG	540
GAAGCCGAGG ATCCCTGCA GCAGCAGCAG CAGGAACAAG AGGAAGCCCT CAAGCAGTGT	600
CGGGAGCAGC ACCTGCGCA GCTGAAGGGC AAGAAGGAGG CGCTCGAG	648

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GGAAAGAAC TAAAAGAAGA GAAGCGACCG GTGCTTTAA GGGTGTCTAA TTTTCAAAG	60
AGACCTCTGG GAGTATTTG CTCTGGCGT TTGGGTGAGC AGGACCGGG CGTTGGAGGG	120
TGCGGGGGC TTGGGAGCAG GGAAGGTTCC GAGTCTTAGG GAGGGGGCAG CGCTCGGCTA	180
TGCCCTCTGG AACACTGGCG GGCTCGGGG CCGAGGGAC CGCGAGGGGA GCCCGCGCTGC	240
GGACCGCGCTG AGCGCGGGAG CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTGGCC TTCATGGCCT AGGATGTTT AAGGCTAGGC CTGAGCGAGG AGGAGGCAGG	60
GGAGACCTGG CAGGTATTGA AGTACCTGGG AAGAAAGGC ATGGGGATGG TCGTCCTGCT	120
CCAAGATGAT AAGTGGAGGC TGAGCGTCAC TGGTACTGGG GGCCATGATC CCCAGGGCCA	180
CCCTGGCACC AGGGTGCAGG GGATGGGGG CCTGAGCAGG AAGAACAGAG ATCTGCGGGC	240
TGCACCGACC CATCCCTGCC CCTAGGCTGA AGAACGGCAT CACTCGAG	288

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

GAATTGGCC TTCATGGCCT ACTGAATTG CTTTTCTTGC CTCTCTTAG TCACCTGTCA	60
CAGGAGGTTG CTGCTCAGTA ATGATATTGT GAGTTAGGAT AATAACTTTT TTTTTTTGT	120

GCTTCAGATT TAGAAGAAAA GATCCTGTTT CCATTTGAAA GGAACGTAA	GCTTTTATCT	180
TTTAACCAAC TGAACAAAC ACCAAAAGCA GCCTAGGGAT GAGCATTTCT	TTGAAAGCAA	240
TTAGGTTATT CACCTGGTAT TAAAATATT TACTGTTAAA AAATCTGTGA	CTTCATGAAG	300
TTGAGTTTTA AAGGCAGCAT CAAAAACTGA AAAGGAAGGG AAAAATAGG	CAGCTTCTCT	360
GCACCTGTTT GGAGCTCCCC AAAACAGGAG CCATGGAGAA GTGGCATCAA	GACCGGGCTG	420
CCCTTCGAG AACACCCGTG GGCAGTCAG AGACACGCTT TTCCTACACT	GCATGCAGCC	480
GCTCGAG		487

(2) INFORMATION FOR SEQ ID NO:754:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 443 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

GCTGGGTTTA GGCGATCCTC TTGCTTCAGC CTCCCAAGAA GCTGGAGCCA	CAGGCATGCA	60
CCACCAACGCC CAGTTAATT TTGTATTTTT TGTTGGGACG GGGTCTCACT	TTGTTGCCCA	120
GGCTTATCTG GAACCTCTGG TTTCAGGACG TTCTCCCTCC TTAACCTCCC	AAAGTGCTGA	180
GATTATAGGT GTGTGTGAGC TATCACACCT GGCCTAGAAA ATTATAAGAA	AATATTAATC	240
ACATAATCTC ACTACCCATT GATGATTAA CATCTAGAT ATACATATGT ATATATAATT		300
TTAAAGTAG GGTATATTA TATAATTACT TCATTATTCT TGTTTCCAC TTAATATAACT		360
TAAGATATCT TTCAAAATCA CTAAATACAG GAACATAGTA TATCATCTTT CAGTAGCCTC		420
ATTGATAGC TAACCCCTC GAG		443

(2) INFORMATION FOR SEQ ID NO:755:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 584 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

GAATTCCGCC TTCATGGCCT ATTGATTTC TGGGTCAGG AGAGGATGGG	GAAGGGGCTC	60
CAGACCCCTCG GCGGTGCACT GTGGATGGGA GCCCCCATGA GCTGGAAAGC	CGTGGGTCA	120
AACTCCAAGG CATTCTGGCT GACCTCGGG ATGTGGATGG GCTGCCCTCA	AAAGTGACTG	180
GCCCCCTCC TGGCACACCC CAGCCCCGGC CACATGAAGG TTCTCTGGC	TTCTCTCAG	240
ACGTCTTCAT CATGGACACT ATCGGGGGCG GGGAGGTGAG CCTGGGGGAC	TTGGCAGATC	300
TCACCGTCAC CAACGACAAC GACCTCAGCT GCGATCTGTC TGACAGCAA	GATGCTTTA	360
AGAAGACGTG GAACCCCAAG TTCACCCCTGC GCTCGCACTA CGACGGCATT	CGTTCCCTGG	420
CCTTCCACCA CAGCCAGTCG GCTCTGCTCA CGCCTCTCGA GGACGGCAGC	CTCAAGCTCT	480
GGAACCTGCA GAAGGCGGTC ACGGCCAAGA AGAATGGGGC GCTAGATGTG	GAACCTATAC	540
ATGCTTCCG GGCTCACAGG GGCCCAGTGT TGGCTGGACT CGAG		584

(2) INFORMATION FOR SEQ ID NO:756:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAAATTAAAA AAATAAAAATC AAGTTCTTGG GTGGTGGGAA ATTGGCCTGT ATTTTTCTT	60
CTCAGTGGAA TTGCTGAGT AAAAATTAT AGGCTAAAA ACTGAGAACT TTGAAGATAT	120
TGCACCATAT TCTTTTGTA TTGAGTGTG TGATGAGAA GTCTGAGGTC AGTCTGTTGC	180
TTGCTCTTTC TAGGTAAACT GTGCTTTTA TATTTTTCC CCTCTAGAGG TTTGAGAAT	240
TTACTCCCTTA TCCATGTTAT TCTTAAATT CACCACATTC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTGGGCC TTCATGGCCT AGAATGCTTT GAATCCATAT CTTTTTCAGA AACATACATG	60
GAAATACAGA ACTACACCTG TAATTACAGA GGGCATATGA ACCCTAGTTT GATAAGCCTT	120
GCTTAAAGG ATGCAGTGTG TTCTATTAA TGTTATTAA ACAATTGCAG AAATGGAAAA	180
TGTGGACCTC CATTAAACAA ATTTTTAGT TCCTAATGAG ATAACATTGG GACCAAACCG	240
ATTCTCTTG TTTCAGTGTG CAAAAATAGT TTCATTTTA GGTATTATG CTTTAGTGGC	300
CTTTCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

GAATTGGGCC AAAGAGGCCT AAGAAAAGAA AGCAAGAACAA GAAAACGAAG CCACAGGAAG	60
GGAAGTAGAC ATTGTATGCT TATGGTTCT CATTATGAAG GTGCAGCTTG TAGGAGGTTT	120
GTACGGATGT GCCTTGAAGT TATGTATATT ACATATAACA GGAAAAAATA TTAAAATAAA	180
CAGTGTGGT CTCGAG	196

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

GAATTGGCC	TTCATGGCCT	ACAGCAAATC	TGCCTTCACA	TGGTCTGCAT	TCTAGTGGAG	60
AAGTCAGATA	GAGGTAAGTA	CGAAGACCAC	AAAGCAGGTT	AAAAAGTAAG	TGAAAAGG	120
GATGCTATTT	TAGACAAGGT	GGTCAGGGCA	AGCCTCTCAG	AAGAGGGGAT	AACTGCTCAG	180
AGACCTGACT	GAAGTGAGAG	TGAGCTATTG	ACACGGAGAA	GGGCATTCA	GACTCTGAAG	240
AGAAAAGCAGG	GGCAGGCTTT	GGAGGGAGAG	CTTGTTTATG	TAGACAAGGA	GGGGCAAAAGA	300
GTCTTGTGGA	TAAAGCAGAA	TGAACAAGAG	TAAATGGGAT	TGTAAATGAA	ATGACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:760:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 192 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

GGACATATGC	AGTCAAAAGT	AGGTGCCAT	ATATATAATG	AAATACCAAA	AGGACAATTT	60
AGAAAGTTGA	ATGAAACAT	TATGGCATGC	TTTAGACGTT	CTGTTTTGGT	TTTCTTATTTC	120
CCAGCTTTG	ATCTTTAGG	TCTATCCATT	GGTAAAGATA	TATTAGGACT	CACATCAACT	180
CAAGGTCTCG	AG					192

(2) INFORMATION FOR SEQ ID NO:761:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

GAATTGGCC	TTCATGGCCT	AGTTTATTGC	TCCCAACTAT	ACATCTTCAG	ACTTCACTTA	60
GCATGTTACG	GGTGGTTAGG	TTCCAGGATT	ATTGAGATCT	ATTTCTACTC	ACAATGCTT	120
ATAAAATGAA	ATCTATCGTC	ACCTTAATTG	CCTGTGCCTA	AAAATATAGC	ATGCTTGTCT	180
TGTGGAAAT	ATTCAAGCCTG	GTATGTGAGT	GACTGAAATG	CAACTCCGTG	GAAAACACCC	240
AACTCCACAC	ATTCACTCCCC	TTGGTAACTC	AGCACAGTCA	CAGAAACTGA	AGAACTAAAA	300
TGATCCTCTT	TATTTGGCTT	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:762:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

GAATTGGCC	TTCATGGCCT	ACTGGCCAA	GTGAAACTTT	TAACAGGCTT	TTTGGAGATC	60
TCTTTAGCTA	GATCCAAAAA	TTCATCAGGT	ATATTTCTG	TTTTCCAAGT	TCATGCAGGC	120
AATAGCTTTG	CTAATATATA	ATACTAGTTG	CCTTGTTCAA	GCTGCCATAT	CAGTTTCATC	180
ACTCCTTCCC	CA GTGCCAC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:763:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

GAATTCGGCC	TTCATGGCCT	AAAAATGAAT	ATATTCTAT	CCTATATTAA	GACACTTCC	60
CTAACCTAAA	AGTTTATTCT	GTGTTTAAAAA	TAAATGAAAG	TATTTGTATG	GGCCCTGGGC	120
CTGACGGAGA	TATGCCCTGC	CCCCCTCTCTA	GAGTGCTGGG	AATTCTCAGG	TGACCCAGTC	180
CCACAGGCAG	CCAAGTGCCC	ACACATTCTC	AGGCTGCCCT	CCACCCAGGGC	AGCGACCTCG	240
GGTCACCAGG	GACACGCACA	CCTAGAAAAGC	CGTGGGCTCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:764:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

AATTCTTTAT	CATTTCAAGAT	ATTAAGGATT	TCAGATTATA	AGAGTTATCA	GTGAAACTGT	60
GTTACAAGAA	TATTTTGTTC	CTGAGACATC	TCAGTATTAT	AGTGCGCTTC	AGACTAACAG	120
GCACAGAATA	GGATAGTGTG	AAGTATCTGA	TTAGCTTAC	TGTACTTGGT	ACCTTTAGGA	180
CGTCAGCCA	GAGGTGATTG	GAGGGATTTC	CACGTCTACC	ACTCGTGTGT	GTATCTGTGA	240
ACCATATCTC	CTTTAGTGCC	TGCTTTGA	CTTTATATAA	ACAGAATGAT	GCTGCCTGTT	300
TATCTCTATA	ATTTTCTTCT	TTCCCTTAGC	ACGTGCTCAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:765:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GAATTCGGCC	TTCATGGCCT	AGAGAATGTT	TTCATGTTAC	TTATACTAAC	ATTAGTTCTT	60
CTATAGGGTG	ATAGATTGGT	CCAATTGGGT	GTATCTCGAG			100

(2) INFORMATION FOR SEQ ID NO:766:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

GGATTGAATT	CTAGACCCCTG	CCTCGTCATT	GTGGAACCCA	TGGAGCAGTT	TGATGATGAA	60
GATGGCTTGC	CAAGAGAAGCT	GATGCAGAAA	ACTCAACAAT	ATCATAAGGA	AAGAGAACAA	120
CCACCACTGTT	TTGCTCAACC	TGGGACATT	GAATTTGAGT	ATGCATCTCG	ATGGAAGGCT	180
CTTGATGAAA	TGGAAAAGCA	GCAGCGTGAG	CAGGTTGATA	GAAACATCG	AGAACGCCAA	240
GAGAAACTGG	AGGCAGAAAAT	GGAAAGCAGCT	AGGCATGAAC	ACCAATTAAAT	GCTAATGAGG	300
CAAGATCTAA	TGAGGCGTCA	AGAAGAACTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC	TTCATGGCCT	AGATAATATT	TTATGTTCAT	TGTGTGTTAG	ACTGTGTTGA	60
AGTGGAAACT	TTGGAACATT	GTTGGAACCA	GTAAGAACCC	CATTCTCTAG	GTATCAGGTC	120
GTAAAGTAG	TTTAAATATAA	CGTATTCTCT	AATTTCTCTC	AGCAGGTTCC	CCCTCCCTTT	180
AACTTGTGTG	TATAAATATA	TGTGTGTGAT	GTGTTCTCTT	ACAAAGATAG	TACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

GAATTCGGCC	TTCATGGCCT	AGGGATCCCA	CCTTTTACAT	CCTAGGTGTG	AACAGATTCA	60
AATCCACTAT	TCCTCCAGAT	TTTATAGATG	AGGAAACCAA	GGTGCACAAG	AGGGATTTTT	120
TTGTTTGTT	TTTTGTTTTT	GTTGTTTTT	GAGACAGGAT	TTTGCTTTGT	TGCCCAGGCT	180
GGAATGCAGT	GGCACAAACA	TGGCTCGCTG	CAGTCTCGAA	CTCCTACGCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

GAATTCGGCC	TTCATGGCCT	ACGGAATGAG	AAGATGAAAA	ATCAAATTAA	GCAGATGATG	60
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GATGTCTCTC GGACACAGAC TGCAATATCG GTAGTTGAAG AGGATCTAAA GCTTTTACAG	120
CTTAAGCTAA GAGCCTCCGT GTCCACTAAA TGTAACCTGG AAGACCAGGT AAAGAAATTG	180
GAAGATGACC GCAACTCACT ACAAGCTGCC AAAGCTGGAC TGGAGATGA ATGCAAAACC	240
TTGAGGCAGA AAGTGGAGAT TCTGAATGAG CTCTATCAGC AGAACATCTGA G	291

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

CGCTGCGTGC TTGTGAGACT GCCTGTTCTG GGACCAGCCC CTGGGCTCTT CCACCAAGAT	60
TTGGTGAGGG TCCCCCTCTG CCTCTCACAG AAGCCCTCTGG CCCTGACTG TCCTGGGGGC	120
AGGGACACCT GTGGCTGGG AAGGGATGGC CAACAGCGGG AAGCAGTTTG CGCTGGTGC	180
CTGATGATGG TGAACCACGA GACAGATGGA GACGGGAGTC AGGGGACCTT GGGGACCCCT	240
CCAGGTCCAG TGACCTTTTC CCAGACAGGC ACTCTCCAGG CCTAGGACAG ACAGGGCCCC	300
AACTCCTCAT CACCCCATGA CTTGGCCTGG AGGAACCTGG GGTGGGAAAC AAGTAGTCCC	360
CCAACCTCAG AGGCCAGAAC CACAGGTGGG GGACAGGGAC CTCGACAGAG CTGTGCCCTGC	420
TCAACGCTCG AG	432

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GGTGTGGCTT TGCCCCGTAC GAGCGGCGCG CCATGGAGTT ACTGAAGGTC TCCAAGGACA	60
AACGGGCCCT CAAATTATC AAGAAAAGGG TGGGGACCCA CATCCCGGCC AAGAGGAAGC	120
GGGAGGAGCT GAGCAACGTA CTGGCCGCCA TGAGGAAGC TGCTCCAAG AAAGACTGAG	180
CCCCTCCCCCT GCCCTCTCCC TGAAATAAAC AACAGCTTGA CAGAAGCCCT GGCTCTCCTG	240
CTGTCCTGTGG GTGGGTGTGG GTGTGTCGGG GGCCCCGAGT CCCCTCTCTG GTGCCCGCTC	300
TGAGGCCACAC CCTCTCCGGG TGCTGCCCTGG TCGTGAATCA AAAGCCGTGG CCCGCCCCACC	360
CTTCCCGGGG CAGCAGGTGA GGAAGCCGCT GTACTCGAG	399

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

GAATTCCGCC TTCATGGCCT ACAAGAAAAA AGAAAAGAAA TCATTAACCC CAGCTGTGCC	60
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AGTTGAATCT	AAACCGGATA	AACCATCGGG	AAAGTCAGGC	ATGGATGCTG	CTTGGATGA	120
CTTAATAGAT	ACTTTAGGAG	GACCTGAAGA	AACTGAAGAA	GAAAATACAA	CGTATACTGG	180
ACCGAGAGTT	TCAGATCCAA	TGAGTTCAC	CTACATAGAG	GAATTGGGT	AAAGAGAAAGT	240
CACAATTCCCT	CCAAAATATA	GGGAACCTATT	GGCTAAAAG	GAAGGGATCA	CAGGGCCTCC	300
TGCAGACTCT	TCGAAACCCA	TAGGGCCAGA	TGATGCTATA	GACGCCCTGT	CATCTGACTT	360
CACCTGTGGG	TCGCCTACAG	CTGCTGGAAA	GAAAAGTGA	AAAGAGGAAT	CTACAGAAGT	420
TTTAAAGCT	CAGTCAGCAG	GGACAGTCAG	AACTGGTGT	CCACCCCAAG	AGAGAAAAAG	480
AAAGGTGGAG	AAGGATACAA	TGAGTGTAC	AGCACTCGAG			520

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

GAATTCGGCC	AAAGAGGCCT	AGTTTATTGT	TTGCATATAT	TTTATAGTGT	AGAGATTAGG	60
CATTATAATA	AAATTTAAA	ATTTCCAGGA	TCTTACAGAA	TGCTTTATG	TTACAGCTTA	120
CTCCTCGAG						129

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

GAATTCGGCC	TTCATGGCCT	ACACAAACGGA	AAGCTGTTT	TCTGATCGAG	GCTCTCTGAA	60
GAGCATAATG	CAGTCCAACA	CATTAACCAA	AGATGAGGAT	GTGCAGCGGG	ACCTGGAGCA	120
CAGCCTGCAG	ATGGAAGCTT	ACGAGAGGAG	GATTGGAGG	CTGGAACAGG	AGAACGCTGGA	180
GCTGAGCAGG	AAGCTGCAAG	AGTCCACCCA	GACCGTGAG	TCCCTCCACG	GCTCATCTCG	240
GGCCCTCAGC	AATTCAAACC	GAGATAAAGA	AATCAAAAAG	CTAAATGAAG	AAATCGAACG	300
CTTGAAGAAT	AAAATAGCAG	ATTCAAACAG	GCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

GAATTCGGCC	AAAGAGGCCT	AGTGAGCGCG	ACCATCATGT	CCATGCTCGT	GGTCTTTCTC	60
TTGCTGTGGG	GTGTCACCTG	GGGCCAGTG	ACAGAAAGCAG	CCATATTTA	TGAGACGGAG	120
CCCAGCCTGT	GGGCAGAGTC	CGAATCACTG	CTGAAACCT	TGGCCAATGT	GACGCTGACG	180

TGCCAGGCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGT GGCCCAGGAG 240
 CCTGTGCACC TTGACTCACC TGCCATCAAG CACCG 276

(2) INFORMATION FOR SEQ ID NO:776:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 586 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTTAA AATAAGGAAC AAGCAATAAA	60
CAGTTTCAAG ACACATAATGG ACATCAATGAG GGAACCAAGG ACAACTGAAG GTGAAGAAAT	120
CACTGAGTCA AGTAGCACTG AAGAAATGGG GGTCAAGAGT GTGGTGGCTG ATACTGACCA	180
AAAGGGTTTA GGAAAGTGAA TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA	240
GAAAAAAAGAA ATTCCAGTGT CAATTTAAAGGAA AGAGCCTGAA GTTACTGTAG TTTCACAGCC	300
CACTGAACCT CAGCCTGTTCA TAATACCCAG TATTAATATC AACTCTGACA GTGGAGAAAA	360
TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAAACTATT CTGCCACAG AATCTGAGAA	420
TCCAAAGGAA AATGATAATG ATTCAAGGCAC TGGTTCCACT GCTGATACTA GCAGTATTGA	480
CTTGAAATTAA TCCATCTCTA GCTTTCTAAG TAAACTAAAGA GACAGTGGAT CGATATCTT	540
ACAAGAACACA AGAAGACAAA AGAAAACATT GAAGAAAACA CTCGAG	586

(2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 463 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAAA GGAAAGTTCA	60
CTGAGATTC TAGCTACAAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC	120
AGCTTCAAAC ATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAAT TGTATTGCTT	180
AGTATTCTAC CAAATTATT AAGTAATTTT TTTTTTTTTT TTNNANACGG AGTCCCCCT	240
GGGCCACAAG NGCNAAAATT TGTTTCNAAA AAAAAAAAGA AAAGAAAGAA AAAAAATTGA	300
ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTCTTG ATTCACCAAG TAATTCTAA	360
CCACAACCTGT TGTGTCTTGA ACACCTTACTA TGCTTGGCAT ACTTATAATT TTTATTTCAC	420
TTTATCTCA AATTAAAGAT GAAGTTCTC CTACTAACTC GAG	463

(2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 466 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

GAATTCTGGCC	TTCATGGCCT	AGCTGGGAGT	TACCTGNTAT	CCTGATGGTG	CCATGTGCTA	60
GCTGGGTGAC	AATAACCCAG	CCACCTAACAA	TCTCAAAGAT	TGTTCCCTTT	TGTGTGAAAT	120
AGGGATAGAG	TTGCTACTT	CCCAGAGCCA	GATAGAGAAC	TTAAGAGATG	AATCTGAAAAA	180
TACAATAGCC	TAATAAATT	CAAGGAAACAA	CTATTATCTT	ACTGGATCTT	TCCAGCAACC	240
ATGTTACTTT	TGGCTGGATT	TTGTATTTTC	CAATTTGTGA	ATGACACAAAC	AAAGAGCTAG	300
GTAGGTTAAG	TAATGGTTT	CAGATAATAA	GCCCCAGTTAG	CCCAGACGTT	TATTTTCCAT	360
TTGCATAGAA	AATGAATGTT	TTATGCATAC	ATTTGTTGC	CCAGGGCTAG	GATATTACTT	420
GCATATGATG	TTCTTATATA	ATTAAAAAAA	AGAATACAAAC	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

GAATTCTGGCC	TTCATGGCCT	AATTCCACAG	GGAAATGGGC	AGACTGAACC	AGTCAGGTG	60
GTGAATTTC	CAAGAACATA	GTAAAGTTG	ATTTAAAATG	CTTTTAGAAT	GCAGGAGCCT	120
ACTTCTAGCT	GTATTTTTG	TATGCTTAA	AAAAAATAAA	AATTCATAAC	CAAAGAGAAAT	180
CCCACATTAG	CTTGTGAGTA	ATGCTCTGAC	CAAGCCGAGA	TGCCCATCT	CTTAGTGATG	240
GCGGCCCTAG	GTTTGAGAC	AGGGAAATT	GGCTCAACTT	CAGTTGAGAG	GGTCAGTCC	300
AGACAGCTTG	ACTGCTTTA	AATGACAAA	GATGACCTGT	GGTAAGCAAC	CTGGCATCT	360
TAGGAAGCAG	TCCCCTGGAGA	AGGCATGTT	CCAGAAAGGT	CTCTGGAGG	ACAAACTCAC	420
TCAGTAAAC	ATAATGTATC	ATGAAGAAAA	CTGATTCTCT	ATGACATGAA	ATGAAAATTT	480
TAATGCTATG	TTATAATTAC	TAATGTACGC	AGACTCGAG			519

(2) INFORMATION FOR SEQ ID NO:780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

GAATTCTGGCC	TTCATGGCCT	ACTAGACCCC	CGCCACAGCA	GCCTCTGAAG	TTGGACAGCA	60
AAACCATTCG	TTCACTACCC	ATCGGTGTCC	ATTTATAGAA	TAATGTGGGA	AGAAACAAAC	120
CCGTTTTATG	ATTAATCTAT	TATGCCCTT	TGACAGCTGT	GCTGTAACAC	AAGTAGATGC	180
CTGAACCTGA	ATTAATCCAC	ACATCAGTAA	TGTATTCTAT	CTCTCTTAC	ATTTGGTCT	240
CTATACACA	TTATAATGG	GTAGCTGT	CTGTAAAGAA	TTTAGCTGTA	TCAAACTAGT	300
GCATGAATAG	ATTCTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

GAATTCGGCC	TTCATGGCCT	AAATGGGAAT	CATCATTGCA	TAACAAACCT	AAAGAGAAAA	60
TGAGAACATT	TACGAAGAAG	AAACAGAGTT	ACTGTACCAA	GGCCAAAAAG	AAAAGAAGGG	120
GGAAAAAAA	TAAGTCCATA	AAAGAAAAAC	AAAAGGAATC	CATGAGCCTG	GACGACAAGC	180
CGTGGGGAT	CTAAGAAGGT	TTGGAACCCA	AAAGGCAAGT	CTAACATCAC	GGGTAACAT	240
GGCGAGGCAG	TTCCACATGC	TGAGACTTGT	GGCTACCCCA	TTAAAAAAGA	CTGTGCATAT	300
TCTAAATGAC	AGCAGTCCTG	CAGTGACGTG	GATATTCACT	CTAGAAAGCTA	TGCAGGCAGG	360
CGTGGGGAA	CGCAAGAGAT	GTGCAACCAT	GCAGCTGCAA	TCTTATGTC	TCTACTGGCA	420
CAACCGAAA	GACTAATGTG	GAATTATCC	AGAGAATTAA	GTTGAGAAAA	ACAGAAGCCA	480
TCAGATTTC	TCTTTAAAT	CTTCAGAGGG	GTATAACACTC	CCCTGGAAAA	CCAAGTTGCC	540
		TCTCTGCTCA	CATCCTCGAG			560

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

GAATTCGGCC	TTCATGGCCT	AGGGGAGTCC	TCATTCTGAC	CTCAAAGAAA	GGACTGTATT	60
GTCTGGCTCC	ATAATGCAGG	GGACACCAAG	AGCAACAATC	GAAAGCTTTG	AAGATGGCCT	120
TAAATATCCC	AAACAAATTA	AAAGGGAAAG	TCCTCCCAT	CGAGCATTTC	AAGGTGCCAT	180
TACCAAAGGA	AAACCATATG	ATGGCATCAC	CACCATCAAA	GAAATGGGC	GTTCATTCA	240
TGAGATTCCA	AGGCAAGATA	TTTTAATCTA	GGAAAGTCGG	AAAATCCAG	AAGTGGTCCA	300
GAGCACACGG	CCGATAATTG	AGGGTTCCAT	TTCCCAAGGC	ACACCAATAA	AGTTTGACAA	360
CAACTCAGGT	CAATCTGCCA	TCAAACACAA	TGTCAAATTC	TTAATCACGG	GGCCTAGCAA	420
ACTATCCCGT	GGATGCCCC	CGCTGGAAAT	TGTGCCAGAG	AACATAAAAG	TGGTAGAACG	480
GGGAAAATAT	GAGGATGTGA	AAGCAGGCGA	GACCGTCCGT	TCCCGGCACA	CGTCACTGGT	540
AAGCTCTGGC	CCCTCCGTTC	TTAGGTCCAC	ACTGCATGAA	GCTCCCAAAG	CACAACTGAG	600
CCCTGGGATT	TATGATGACA	CCAGTGTCTC	GAG			633

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

AAATGACACT	GAATGACACG	TTAGCCAAA	CTAACAGAGA	ATTATTAGAT	GTGAAGAAAA	60
AATTGAAAGA	TATAATTCAG	GAATTGTAA	AAATAAAAGA	TAAGAATGAA	ATATTAAGAA	120
GAAACCTGGA	AAACACTCTAG	AAACAAATAA	AAGCTGAGTC	CATCAGCCTG	GCAGAGCAGC	180
AGGCAAAGAT	GAGCTCGCTA	AGTCAGAGCA	TGAGAAAGGT	GCAGGATAGT	AATGCTGAAA	240
TCTTGGCCAA	CTACAGAAAA	GGCCAAGAAG	AGATTGTGAC	ACTGCATGCC	GAAATTAAAG	300
CCCAGAAGAA	GGAGCTCGAC	ACAATACAAG	AATGCATTAA	GGTAAATAT	GCCCCAATTG	360
TCAGCTTGA	GGAGTGCAG	AGAAAATTAA	AAGCAACAGA	GCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

GCAGAAAAAGT CAGAACATT TGAGGAGCTT CAAAGCATCC TTAAGAAAGG GAAACTAAGT	60
TTTGAGAATA TTATGGAAA ACTGCGAATC AAGTATTCCG AAATGTACAC CATACTCCCT	120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG	180
ATTAGCAATG AAGTCTTAAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA	240
ATTACAATG GGCTTCATAA TGTTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG	300
AAAGCTCAAG AATTCAAAA GAAAATGTGG GACTCACTCG AG	342

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAGATAATGG ATGAAAGGAT TCAGAGAAA GTAGAGAAC TAGAGCAACA ATGTCAGAAA	60
GAAGCCAAGG AATTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTTGCCTTC	120
CAACATTTC AAGAACTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTCACCTT	180
GGAGACCAAGT TAGAGGGGT AAACACACCC AGACAAACGGG CAGTGGAGGC TCAGAAATTG	240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTT AACAAATTCT	300
GAAAAGATAA AGGAAGCGC AGACATCATT CAGAAGTTGC ACCTAATTGC CCAAGAGTTA	360
CCTTTGATA GATTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTAGAA	420
TGCCAGCNGA TTCAGGAGTA TACCAGTGCT CTCGAG	456

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

GAATTCCGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCCAAGT TGTATCCAAG	60
GCAGTCAGAC AGGGGGATTG GGGCTGTGTT GTGCCCCAGC GCTGCAAGGT GGCCAAACAGC	120
GACGGCGGTC GGGGGACACC TGCAGTGAGA GGCTCCCCTC TCAGCACACT CGTCTCGCTT	180
CCCTCAAGCT TTGGCTGATT TGGATCTGTT TGCTGAACCTT CCAACAAATTG CTCAAAATCA	240
TCCACAAAGA ACTCCTTCAG TGGAGGGCGC TTTGGCCTCT TCAGGGTGTT CAGAAAGCTGC	300
TGGATTTGG AGGACACTCT GCTGTTCAAA GGGACACCAT CTGCTGTTTC CAGCATGCTC	360
CCGCTGCACC CCCGAGGAAAC ACTTCTCACAA GAAGGCCACT GTGGACGCTC AAAGTACGAA	420
TGCTCCACGA GCCCGCTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG	480
GCCTCGAG	488

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

GAATTCGCCT	TCATGGCCTA	AGTGTCCGGA	ACATATGTCA	TGATTCTATG	TCCAAACAAC	60
AGGCCAACCC	TCAGGACAGA	CCCCGCCACC	CCCCTTCTCT	GCAGCTCCTG	GCAGGGACGG	120
TGCACAGTGG	TGCCGTGTGC	AGGGGCCAG	CGCAGCCACT	GGGCATCTGG	GGCAGCGCTG	180
GTCGCTGGC	CACCTCTTG	CTGGGGCCGC	TGGGCCCTCG	GCCTAGAAGG	ACAGGAAGCC	240
ATCCACCTCA	AGGCGCACGA	AGGGGTCCAG	CAGGGCCCGG	AGCTTCAGA	TGGTGGCACG	300
GCTCAGCAGG	GGCGGCACCA	GCCCCCTGGG	TTCACCATGT	ACACGTAGGC	360	
GACCAAGCAGG	GTGCCAGCA	GCAGCCTCG	GATCAGCAGC	CTGAGAATCT	CCAGCTGGAT	420
GTCCTCCATC	TGGTCCCTAG	ACCTGCCTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

GAATTGGGCC	TTCATGGCCT	ACAGGACAGA	GGCAAATAGT	AGACAAAGGT	GAAGCCAAAG	60
GCATAATTAA	GGAAGGAAGA	ACGATATTAC	CAAAAGATGA	AACTAAAAAG	AAAGTCTTAA	120
CTGTGTCAA	TTCTCAAATT	GAAACTGAAA	TTGAAGTCC	ATCGTCCGCA	GTTCCAGAAC	180
ACAGAATGTA	TGAAAATCAA	AGTCAGGTGG	TTCTTGAGA	AAACCTTCAT	GTTAACAAAAA	240
CAAATGAAAC	AATCAGACAT	GAAAATAAAC	CGTATGTTCC	TAGTTCAGCA	CAAATGACAA	300
GAAGGAAATT	CCAAAAGGCT	AAGGCAAATT	TGGGAAGAGC	ACACAGTAAG	AAAGAGGAAC	360
CAGTTTAGA	AAAAGTCACA	AACTCGAG				388

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

GCCTGAAGAC	ATCAAAAGG	AGGCAGCCG	GGCTTCTAGG	AAGATCTGCT	TTGTGTGCAA	60
GAAAAGGGA	CTCTGCTATCA	ACTGCGAGAA	GGATCAGTGC	CTCAGAAACT	TCCATCTGCC	120
TTGTGGCCAA	GAAAGGGTT	GCCTTTCACA	ATTTTTGGA	GAGTACAAAT	CATTTGTGA	180
CAAACATCGC	CCAACACAGA	ACATCCAACA	TGGGCATGTG	GGGGAGGAAA	GCTGCATCTT	240
ATGTTGTGAA	GACTTATCCC	AACAGAGTGT	TGAGAACATC	CAGAGCCGT	TTGTAGTCA	300
AGCCATCTAC	CACCGCAAGT	GCATACAGAA	ATATGCCAC	ACATCAGCAA	AGCATTCTT	360

CAAATGTCCA CAGTGTAACA ATCGAAAAGA GTTCCTCAA GAAATGCTGA GAATGGGAAT	420
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG	457

(2) INFORMATION FOR SEQ ID NO:790:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 582 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCCGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCGG GAGTTTTGC	60
TACACTTTC GCCACCATGA GTCGCAGCTA TAATGATGAC CTGCACTTCT TCGAGAAAGAT	120
CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCGTCGCC AACATCGCAGG TTGAAGGTGT	180
TTCTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCGTGCG	240
AGGTGGTGGT GTTGGTGGCT TCCTGCCAGC CATGAAACAG ATTGGCAATG TGGCAGCCCT	300
GCCTGGAATT GTTCATCGAT CTATGGCCT TCCTGATGTC CATTCAAGGAT ATGGGTTTGC	360
TATTGGAAC ATGGCAGCCT TTGATATGAA TGACCTGAA GCAGTAGTAT CCCCAGGTGG	420
TGTCGGGTTT GACATCAACT GTGGTGTCCG CCTGCTAAGA ACCAATTAG ATGAAAGTGA	480
TGTCAGCCT GTGAAGGAGC AACTTGCCCA AGCTATGTT GACCACATTC CTGTTGGGT	540
GGGGTCAAAA GTGTCAATCC CAATGAATGA CAAAGACTCG AG	582

(2) INFORMATION FOR SEQ ID NO:791:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 468 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCCGCC TTCATGGCCT ACATTTCTG AGAAAGGTTT GGATGACTGA AATATTCCT	60
CTACACTCAA GGACTTTGGC ATGTGGTGGC TGAAACTGAG CTTTTTTGTG TGGGCTCCAG	120
TTCTCACTGT TCTGCAATGC TCATGGCAAG TTGAATGGTG AGCTAGCTTA TAAATTAAG	180
AGCTCTGAAC TGTATTCAAGA CCGACTGGGT ATCTAGCTTA CTGTTTTAAC ATCATTGTTG	240
AAACCCAGACC CTGTAGTCCA GTGGTGTGCG CCTGTTGTGC AAACCTGCTCC TTTTTCTCGT	300
GTTTTGTAA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT	360
GCAGTCAGCT AGGACCTTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC	420
AATGCTTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG	468

(2) INFORMATION FOR SEQ ID NO:792:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 519 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

GAATTCTGGCC	TTCATGGCCT	ACGTGGCTAT	AACTGGAAAA	CTGGATCCGA	AATCGACCAG	60
TAAACTGGGT	AGCTCGGTCT	ACGCCCCGCC	CACCAACCTT	GCTAGCCAAT	AGCCTTCACA	120
ACTCTTCTGC	CACTCCCGCC	CATTCCCAGTG	CTGTGCCCT	GCTTTTCTT	CCACTCGGAT	180
CTCTTGAGCG	CCCTTAGGCC	GCTGTATACG	CGCCCCCTCCT	CGGCTTCAGT	AGGCAAGAGG	240
GCCATCTGCC	CTTCCTTCCT	GAAGGTAGAG	GGGACAAACAC	CAGCTACGAC	GGGGACTCCA	300
GAAGTCCATC	TCCCGAACAG	CAGCGGGCG	AAAAGAAAAGA	AAAAGGGTTT	CCGAAGACTC	360
CTACTCACAC	CCACGCTTC	CCTTAACCCG	GAAGTGTATT	CCGCCCTCC	TCTCCCTCTT	420
CGGTGTGATAC	TGGAGGAGAA	GGACGGCCAG	GTCTGGCCCG	GCATGCCCTG	GGCTTCCGGT	480
GACCTCTGGC	CCTTTCTGT	CGTCCACTCT	CCGCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

GAATTCTGGCC	AAAGAGGCCT	ACAGAAACAT	CCAATTCTCA	AACTGAAGCT	CGCACTCTCG	60
CCTCCAGCAT	GAAAGTCTCT	GCCGCCCTTC	TGTGCCTGCT	GCTCATAGCA	GCCACCTTCA	120
TTCCCCAAGG	GCTCGCTCAG	CCAGATGCAA	TCAATGCC	AGTCACCTGC	TGCTATAACT	180
TCACCAATAG	GAAGATCTCA	GTGCAGAGGC	TCGCGAGCTA	TAGAAAATC	ACCAGCAGCA	240
AGTGTCCCAA	AGAACGCTGTG	ATCTTCAAGA	CCATTGTGGC	CAAGGAGATC	TGTGCTGACC	300
CCAAGCAGAA	GTGGGTTCA	GATTCCATGA	ACCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

GAATTCTGGCC	AAAGAGGCCT	ACCAGGATGG	TCTCAATCTC	CTGACCTCAT	GATCTGCCTG	60
CCTCGGCCTC	CCAAAGTGT	GGGATTACAG	CGTGAGCCA	CCGCACCCGG	CCCTAAACCC	120
TAGTTTTGTA	CTTCTGTAA	AAGGAAAGAT	TTAAACAAAC	AAACAAACAT	TAAATTACAA	180
CCATAATAAA	CAAAACACAA	CTAAACTAAA	TTACAACCAT	AATAAAATCT	CCCAAAGTCC	240
GTAGGCCTG	ACATATTACA	GCCTTGCCAA	ATCAGAATAG	ATTTCATG	TGTTGTCAT	300
TTACCAAGACA	CAAAGAGTAG	CTCAGATCTC	ATAGACTCTT	CAGATCTGT	AGACTAATT	360
CAAGTCTTT	TAAAGTTTG	AAAACATGT	GCTATTGGA	ATTACGTAT	CCTCGAATAT	420
TAAACCTGAG	CTCAAAAC	TATTGTTGA	TATTGAAAT	AGTTAACTCC	AGTTTTCTTC	480
TATTAAGATA	AAATTCCTTC	ATCATGTC	TGCCCTCTAA	AATAATCTC	CTATTGCTT	540
GTCTCCCT	TCTCCCTCC	TAGTCTTCT	TTAGTCATC	TATTAGAAT	CAAGTCGCTC	600
ATGAGTTAA	GAATTAGAGC	AGCAAGAAAT	TGGGCTAGAG	ATGTACAAAA	GCTTGGACA	660
ATAGTAGTTT	TGCTTGTCT	CATTCTTATT	AGAAGTGTG	TTAATTACT	GATAAATTCT	720
AGGACGGAAG	ACAAATCTT	GCAACTGGTA	CTCGAG			756

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

GAATTGGCC	AAAGAGGCCT	ACCAAGAACG	TCTCTGCTT	GTCATGAAGT	GAGAACAAATG	60
AAAAGCTATA	GCAGATACTC	AGTTTAACTC	TGTGTAGAAC	CTATTAGTGT	TTGAGCTGTT	120
ATTCAAGATTT	GAATTCAAGAC	TGTGTGTTGT	TTGCTTATGG	ACACTGCCG	TCGTTCTGTC	180
ACTGTTAAAT	TAATGAGTCT	ATAAGGTTTT	TCTTCCAGAG	GCCATAGGTG	ACATCACTAA	240
AATTGCAAGA	TAATTGCAA	TCTTGNTGN	TGCTGCACTC	CCCAACCTCT	CCCCCACCCC	300
CCGTTGGTGTG	CTGCTTTCTA	GATGAGCGTG	TTTGGAGCA	GGCCCATCTG	GGACACTCTA	360
TGCTTCACC	AAGGAAGTGC	GATCTGAGCA	GCCACAAATCC	AGCCAAAAGA	GGATCGTAGA	420
TATTGGCTCT	GATCAACTAG	ATGAAAATAT	AGCAGAAATGG	ATTTAGCCCA	CTGTTCTGTT	480
TTATCCAAC	GAGTCTCTGA	CCAGCAATTG	GTGCATAATT	ATTACAGCAA	AAGTTAAGAA	540
ATGAAAATGT	AGCAATTATG	TAAATGAATG	TGTTGGCCTC	TTAATACCTG	TTACTAGTGG	600
ACTTCTGTG	AGGAAGTTAG	TTTTTGTTT	TGATGAAATG	CTCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

GAATTGGCC	AAAGAGGCCT	AAGAGGCTGG	CCCCAGTCCC	AAGGAACAAG	AGATGGTCAA	60
GTCCTAGAG	ACATATCAGG	GGACATTAGG	ATTGGGGAAAG	ACACTTGACT	GCTAGAACATCA	120
GAGGTTGGAC	ACTATACATA	AGAACAGGCT	CACATGGGAG	GCTGGAGGTG	GGTACCCAGC	180
TGCTGTGGAA	CGGGTATGGA	CAGGTATAAA	ACCTAGAGTC	AGTGTCTGT	TGTTCTAGC	240
CCATTTCAGC	ACCCCTGCCAC	TTGGAGTGGA	CCCCCTCTAC	TCTTCTTAGC	GCCCTACCCCTC	300
ATACCTATCT	CCCTCCTCCC	ATCTCCTAGG	GGACTGGCGC	CAAATGGTCT	CTCCCTGCCA	360
ATTTGGTAT	CTTCTCTGGC	CTCTCCAGTC	CTGCTTAACTC	CTCTATTTTT	AAAGTGCCAA	420
ACAAATCCCC	TTCCCTCTTC	TCAAAGCACA	GTAAATGGC	ACTGAGCCCT	ACCCAGCACC	480
TCAGTGAAGG	GGGCCCTGCTT	GCTCTTTATT	TTGGTCCCGG	ATCCTGGGCT	GGGGCAGAAA	540
TATTTTCTGG	GCTGGGGTAG	GAGGAAGGTT	GTTGCAGCCA	TCTACTGCTG	CTGTACCCCTA	600
GAAGCTCGAG						610

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

GAATTGGCC	AAAGAGGCCT	AGCCACTATC	CTGGTTACTT	GTGGATTAC	CAAGCAGTCC	60
AGCAAGTCAT	CCGTAGAAAT	GAATGTTGA	GGAGTCGTAG	TAGTATTGAA	GGCAATCTGT	120
TCCTCAATTG	CATTTCACT	GTTGCTCATT	ATTTGTTGTC	TCTTGGCACA	ATGCAATT	180
CCAAAGTGT	CTCCATCCTT	GTCCACAAAG	TCTTCCCAT	CACTTCCAAA	TATGCCTCCT	240

CTTTCTGAAG CGGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCTGGCC AAAAGAGGCCCT AGTTTTTAT TGGTTGGAG ACTAGAGCCA ATAGTATAAT	60
GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT	120
TTTTTTTTTG TTTTGTGCGT GTAGTTATGG CACTAGTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCTGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTG	60
TAGGGCAGCA GTCAAGGATG AGTAGGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA	120
TAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTCT CTTTCACATG	180
ACAGAGTACA TGTGGCCTGG CATCTAGAAA GCATATTGT CTCTGCTCCA CTGTGCTTC	240
CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACCT CCTAGGGTGT TGTCTACACC	300
TGCTAGCCA TAGCTAATT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA	360
GCCTCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA	420
GTGTGGCTCC TCCTGGGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG	60
ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTCATCCCC TGCACAGGCG	120
AGGAGCCTGG TGAAGCCAAG GAGAGAGGG CACTTCGGGG CGCAGTCTTA AATGGCGGCC	180
CTCCCAGCAC GCGCATCACA CCTGAGTTCT CTAATGGGC CAGTGATGAG ATGCCATCCA	240
CCAGCAATGG TCAAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTGCAC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 464 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

GAATTCCGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCC	60
AATTAATTCA CAAGTTCAA GGTCACTAAC TTTGGTTATA TTATATTATT ATTTCCAAT	120
TTAGCCACCT CTTTATTGT ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTA	180
GGACATAAA AGTGGCATTC GGACGATGTT GCTCTGAAT TTATGCATTA ATTAAACCGG	240
TATATATGTA TGCTTAAATT AAACCAATTT TTATGAAGTT CCTACTGTGT TACAGACGTG	300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAAATATAA AGTACTTCC TTAGGAAGCT	360
TCCATTCTAA TGGGAGAGTG TTGTTAAAGA GATATATAAT AATATGTAAA ATGAATCCAT	420
AATGGTGAGT ATTATGAAGA ATAAAATTGC CAGGTTTCT CGAG	464

(2) INFORMATION FOR SEQ ID NO:802:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 650 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

GAATTCCGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTG GC TTCTTGTGAT	60
TTGTATCACG AGGGGGAAAG GTCTTACTG TTTTCCAGA CCTACAGTT TGATAGAGGC	120
TCCCTCCAGC CCCGCCACA GACCCAAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC	180
TTGGCTTTA TTTTGTGTT CGTGGGGGC AGCATATGGA ACCAAAAAAT AGTATCATAG	240
CCTAAATTG GAGCTTGTG CCAGCCTTGT CTGTTAGATG ACCCGTGTGG GTCTCACCTG	300
GTGACTGGGA GTCCACAGGG GTCAAGTTAGT AGCAGGGAGC TGCAAGGGCGC CTGTCAGCAG	360
AGACCGTCTC ATTCCCCAAA CCCAGGAGCC AGAGGAACGT AGCAGCCGGAT AAATGCCAA	420
GCCGCCCCGG GTGGGATTAG TCGTCTACCT TCCCAGAAAT ACACCTCCC ATCCTGTGAC	480
TTGGATACAG TTTACTGTG AAATTAGGGA ACCTCTGCG CCTTACCAAG AAGCTGTGGC	540
TGGAACCTAG TCAATGAAAA ATGATTTGTA AACTCTTGG AGCTGGCTTT GAAAGAATGT	600
TTAAAATGAT AGCTGATACT GCCAGACAAAC AGAACAGGCC GGCCCTCGAG	650

(2) INFORMATION FOR SEQ ID NO:803:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

GAATTCCGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAAATTCC TAAGTAGCCA	60
ACTGATTGC AGTGCCAGAA ATGAATACCG ATCCACTCGA G	101

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 723 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

GAATTCTGGCC	AAAGAGGCCT	AGCTCTCTGT	ACCCAAGGAA	AGTGCAGCTG	AGACTCAGAC	60
AAGATTACAA	TGAACCAACT	CAGCTTCCTG	CTGTTTCTCA	TAGCGACCAC	CAGAGGATGG	120
AGTACAGATG	AGGCTAAATAC	TTACTTCAAG	GAATGGACCT	GTTCTTCGTC	TCCATCTCTG	180
CCCAGAACGAT	GCAAGGAAAT	CAAAGACGAA	TGTCTTAGTG	CATTTGATGG	CCTGTATTT	240
CTCCGCCTG	AGAAATGGTGT	TATCTTACAG	ACCTTCTGTG	ACATGACCTC	TGGGGGTGGC	300
GGCTGGACCC	TGGTGGCCAG	CGTGCATGAG	AATGACATGC	GTGGGAAGTG	CACGGTGGC	360
GATCGCTGGT	CCAGTCAGCA	GGGCAGCAAA	GCAGACTACC	CAGAGGGGGA	CGGCAACTGG	420
GCCAACTACA	ACACCTTGG	ATCTGCAGAG	GCGGCCACGA	GCGATGACTA	CAAGAACCT	480
GGCTACTACC	ACATCCAGGC	CAAGGACCTG	GGCATCTGC	ACCTGCCAA	TAAGTCCCC	540
ATGCAGCACT	GGAGAACAG	CTCCCTGCTG	AGGTACCGCA	CGGACACTGG	CTTCCCTCAG	600
ACACTGGGAC	ATAATCTGTT	TGGCATCTAC	CAGAAATATC	CACTGAAATA	TGGAGAAAGGA	660
AACTGTTGGA	CTGACAAACGG	CCCGGTGATC	CCTGTGGTCT	ATGATTTGG	CGACATCCTC	720
GAG						723

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 406 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

GAATTCTGGCC	TTCATGGCCT	ACGGCCAAAG	AGGAGGGAGAT	GGCGCCAGTC	AGGGAGCGGC	60
CGTGGCCAG	ACAGTGAGGA	AGCGCGAAGG	CGGAGCAACC	GAGGAATCCT	CCGGAGAAAGA	120
ATCAGAGCGG	TGCTCTACCGC	CACTACCGCC	ACCACCATGG	AAGGAGCAA	GCCGACATTG	180
CAGCTCGTGT	ACAGGGCAGT	GCAGGGCTT	ACCACGACCC	AGATCCCGAG	GGAAAGGAGC	240
GCGCCCTTTT	TTGGCTTGGG	GAGCTGCAGC	GTTGGTTCA	TGCAATGGGAG	ATCTCAGACC	300
AGTTGTTACA	GATCCGGCAG	GATGTGGAGT	CATGCTATTT	TGCTGCACAG	ACCATGAAAA	360
TGAAGATTCA	GACCTCATTT	TATGAGCTCC	CCACAGTACT	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

GAATTCTGGCC	TTCATGGCCT	ACGCCGGGT	TGGAAGTGTG	CAGTCATGA	GCTCCCGCTC	60
CTCCTGGATC	CGTCTGTAGG	TCTCCCCGGT	GTGCATGAGC	AGCTCACTCA	CTGGCTTCTT	120
TAGGTGTTCG	CTGAGGGCTT	CCTGCTGCTT	CTTCCGCAGG	GCTGTGTTAC	GCTGCCAGTT	180

TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTTGGGGC	240
TTTTGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT	300
CCGCTCAGCC AGCTGGGTGT TCCCTCGAG	329

(2) INFORMATION FOR SEQ ID NO:807:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 225 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTTATT	60
TCAGTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTAC	120
CCTTCAACAT TAATATTTT TAGTGCTCTA ATATAAAACA CAGAAAACCT ATCTCAAATA	180
TAAAAGATGA ATATAAAATT ATTAATTTAA CAACTGGCGC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:808:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GAATTCCGGCC TTCATGGCCT AACCTGCTCT TCTGTTCTA GTTTTATAAA GTGAAAGCTG	60
CAATCATGGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTAT GTAATTCTT	120
TTTCTTTTT TTGAGACAG AGTCTCGCTC TGGTGCCTAG GCTGGAGTGC AGTGGAGTG	180
TCTCAGCTCA CTGCAACCTC TGCCCTCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC	240
GAGTAGCTGG GATTACAGGC CCCCACCAAC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:809:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTA ATTTGAAGAT	60
ATTCTTCCTG GACTACTTGT TTATAGTTA TTAAATGAAC TGCTCTATTT CTAAAAACTT	120
TATTTTTAAA GTCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTTATATTC	180
TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG	240
CGATATCCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:810:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

GAATTGGCC	TTCATGGCCT	AGATTGAAATT	CTAGACCTGC	CGACGGGGG	AGAGACAAAAA	60
AAGAGAAAGT	CTTGAAAAG	CACAAGGAGA	AGAAGGATAA	AGAGTCACCA	GAAAAGTACA	120
AGGACAGGAA	GGACAGAGCC	TCAGTGGACT	CCACGCAAGA	TAAGAAAAAT	AAACAGAACG	180
TCCCCGAGAA	GGCTGAAAAG	AAGCACGCTG	CCGAAGACAA	GGCTAAAAGC	AAACACAAAG	240
AGAAGTCGGA	CAAAGAACAT	TCCAAGGAGA	GGAAAGTCCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

GAATTGGCC	AAAGAGGCCT	AGGCTTCCAC	CCAGGAAATG	ATCCAGAGCC	TCTTTTATGT	60
TATGTTTTT	GTTCAGTCCT	TTCAAGACAA	TCGATCAAGC	CAGAGGCATT	CCCCACCCCTT	120
CAGCAAGACA	CTTCCCAGTA	AGCCCAGCTG	GCCTTCAGAG	AAAGCAAGGC	TCACCTCCAC	180
CCTGCCGGCC	CTGACTGCTT	TGCAGAAACC	TCAAGTCCCAC	CCCAAACCCA	AAGGCCTCCT	240
TGAGGATGAG	GCTGATTATG	TGGTCCCCGT	GGAAAGATAAT	GATGAAAAC	ATATTCAATCC	300
CACAGAAAAG	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

GGGATGCATA	GATTTAGTTC	TGCCTCACAG	GCAGGTAGCC	TGAGCTCCTA	GGGGGAACGT	60
TTTTGCTAA	GTAGGGAATG	AAAAGCATGT	TTATTTAACG	ACAAAATTAA	ATCTCTCCTA	120
TTTTTATATG	ATTTCCCGTT	GTTCCTTCTCC	CTGTAGGGAA	ATCTGCTGTG	ATAGAGAACT	180
CGCTAACAGG	CCTTTTCTGT	GAGCGCTCAC	TCATACATTA	TGCACGACGT	GGCTAAGATC	240
TTTGATGGCA	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GCAAGCGGCG	CATGCAGGAG	GAGAAGCAGA	AGTCTGTCAA	CGTCAAGAAG	ACCATCCTGG	60
AGATGCGCTA	CGGGGCTGAT	GTGGATGCCG	GCTCCATTGT	GCACGCCGCC	CAGAAGCTGG	120
GCGAGCCTCC	CGTGCTGCC	GTATCTCGCA	TGGCCTCCAT	CCCCTCCATG	ATCGGGGAGA	180
AGCTGCCCAC	CGCCAAGGGG	TTGGAGGCCG	GGCTGGACAC	ACCCAAGGTA	GCCACCAAAG	240
GCAACTATAT	CGAGGTGCGC	ACAGCGCCG	CGGGGGACGG	TCTGGCTCGG	CCCGAGGATG	300
ACCTCCCGGA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

GAATTCCGGCC	TTCATGGCCT	ACGAACTCCT	GACCTCAAGT	GATCGGCCTG	CCTCAGCCTC	60
CTAAAGTGCT	GGGATAGCCA	CTGTGCCAG	CCTAGCCCT	CTTCAAATGT	TTGGTAAAAT	120
TCAGCATGTA	AGCCATCAGG	TCTTGGGCTT	TTTGCTGGGA	GATTTTTTAT	TATGGCATCA	180
ATCTCATTAC	TTGTTACTCG	CCTGTTAGG	TTTCAGTTT	TTTCATGTT	CAATCTTGGT	240
AGGTTGTTTG	TGTCTAGGAA	TGTATCTGTT	TCTTCTAGGT	TTTCCAGTTT	CTTGGCGTAT	300
AGTTACTCAT	AGTAGCCACT	AATTATCCTT	TGGATTCTG	CGGTATTGTT	TGTAGTGTCC	360
CCATCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

GAATTCCGGCC	TTCATGGCCT	AATTGAATT	TAGACCTGCC	TCAAGCCTAT	CTTTTAGTCT	60
TCTCTAGAACG	ACCGTGTTC	GTGGAACCTCA	GCATCAGCAG	CTTGCTGAG	GACTCCCCA	120
TCTTCCCTTC	CTTCCCCGGA	AAGCACAGAC	CTAAGTGAGT	CTTCACTGG	TCCCAGCTAA	180
CAGCTTCTGC	CCATCCCTAT	CTTTCCACAG	AGCCACTGGC	AGCCCCAGCT	GCAGCAGCTA	240
CGTGACATGG	GCATCCAGGA	CGATGAGCTG	AGCCTGCCGG	CCCTGCAGGC	CACCGGTGGG	300
GACATCCAAG	CAGCCCTGGA	GTCATCTTT	GCTGGAGGAG	CCCCATGAAC	TCCCTGCTTC	360
CCCTGAACCC	CCAGCACTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GCCACGGTGC TCATTCAGAC TACCCGTG TG CCCAAGCAGG TGGCAGTACC CGCGACAGAC	60
ACCACTGACA AGATGCGAGAC CAGCCTGGAT GAAGTCATGA AGACCACAA GATCATCATT	120
GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTTCTT CTATAAACTT	180
CGTAAGCGGC ACCAGCAGCG GAGTACACTC ACAGCGCCC GGACTGTTGA GATAATCCAG	240
GTGGACGAAAG ACATCCCAGC TGCAACATCT CGAG	274

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCCGCC TTCATGGCCT ACAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA	60
NTTACCGAGAG TCCCTTGAAC CTGGGAGGGC GAGGTTGCAG TGAGCTGAAA TCATGCCACT	120
GCACCTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAAA AAAAAAAAAT AGCGAGAGAT	180
CGAGAGAGAG TGACGTGAG AAGACTACTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG	240
TTACAGGGTT TCTTTGGGG ATAACGAAAA TGTTCTAAA CTGGACTGTC GTGATAACTG	300
CACAACTCTG TGAATGTACT AAAAACTACT GAACTGGCCG GGCGCGGCAG CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GAATTCCGCC TTCATGGCCT AGGCAGGGTG TCAACTTATT TAATTCTAAA AATAGTATAT	60
TCATAGAGAT ACTATCATCC TCATTTCATCA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA	120
TTGCCAAAG, TCACCCAGAT AATAAGTACA AAAGATGGTA ATGAAATCCA GGTTGGCCTT	180
CGAG	184

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

GAATTCTGGCC	TTCATGGCCT	ACAACAACAA	CAACAAAAAA	ACATCATCCG	GGGAAGCTTT	60
TCAAATATCCT	GACCTGGGT	CTCTCCACTG	TAGATGGAAA	TATGGAATTG	GGAATAGACA	120
TCGATATTTT	TGGAGGTCCC	CAGGGGTTAC	CAATGTGCAG	ACAGGTTGG	GAACCACTGC	180
ATTAGGCATT	TTACATTTAT	TTAGGGCTT	CACTGGATT	GTCACCCAT	ACTTCATAA	240
TCCATTTTTT	CTGATTTTTT	TTCTGGTTT	TGGTGAGGGT	ATAGTTGGG	TGGGGTTTT	300
TTTTTGTCC	TCCCACCGCT	CGCCCCCATC	CAGTGTGGAC	GTACTCGAG		349

(2) INFORMATION FOR SEQ ID NO:820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

GAATTCTGGCC	TTCATGGCCT	ACTCTTCCT	TGAAGAATT	GTTGAAGACT	TCAGAAAGTGA	60
TGCTGGCTGC	TTCTTCATT	AGGTTGAGCT	CCCCATCCTC	CTTACAGCG	ATGGTATATG	120
CCACAACTGC	ACTGATATCT	ATTTGTCAA	AGCCTTCAGG	TCTCGAG		167

(2) INFORMATION FOR SEQ ID NO:821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

GAATTCTGGCC	AAAGAGGCCT	AGCGAAATAA	AACAAGGGAG	TCAGCAAAAC	CAGAAATTTC	60
AGCAATGTCA	GCTCATGACA	AGGCTGCATT	ATCAGAAGAG	GAAC TGAGA	GGAAAGTCGAA	120
ATCTATCATT	GATGAATTTC	TACACATTAA	TGATTTTAAG	GAAGCCATGC	AGTGTGTGGA	180
AGAGCTGAAT	GCCCCGGGCC	TACTACATGT	TTTTGTGAGA	GTGGGAGTGG	AGTCACCCCT	240
GGAAAGGAGC	CAGATCACCA	GGGGATCACAT	GGGCAACTA	CTCTATCAGC	TGGTACAGTC	300
AGAAAAACTC	AGCAAACAGG	ACTTTTCAA	AGCTTTTCA	GAAACTTTGG	AATTGGCAGA	360
TGACATGGCC	ATTGATATT	CCCATATTG	GTTGTACCTT	GCTGAACCTGG	TGACCCCCAT	420
GTTAAAGAA	GGTGAATCT	CCATGAGAGA	ACTTACCCATA	GAATTAGCA	AACCTTACT	480
TCCCTGTTGGA	AGAGCTGGGG	TCTTGCTATC	TGAATATG	CACCTACTAT	GCAACAAAT	540
GAGCCATAAG	AAAGTGGGAG	CCTTATGGAG	GGAGGCTGGA	CTCAGCTGGA	AGGACTTTTT	600
ACCAGAAGGA	GAAGATGTAC	ATAATTTC	TTGGGAGCAG	AAGTTGGACT	TCATAGAGTC	660
TGACAGTCCC	TGTTCCCTCTG	AAGCACTTTC	AAAGAAAGAA	CTGCTGCCG	AAGAGCTGTA	720
TAAGCAGACTC	GAG					733

(2) INFORMATION FOR SEQ ID NO:822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG	TTCTGCAGAA	GAATCACTG	TTTGTCCCTGA	GACACAGGTA	AGTCCTCTG	60
AAACTTTGA	CCTTGAAAGA	GAAGTCTCTC	CAGGTAGCAG	AGATATCTTG	GATGGAGTCA	120
GAATAATAAT	GGCGATAAG	GAGGTTGGTA	ACAAGGAAGA	TGCTGAGAAG	GAAGTAGCTA	180
TTTCTACCTT	CTCATCCAGT	AACCAGGTAT	CCTGCCGCT	ATGTGACCAA	TGCTTCCAC	240
CCACAAAGAT	TGAACGACAT	GCCATGTACT	GCAATGGTCT	GATGGAGGAA	GATAACGTAT	300
TGACTCGGAG	ACAAAAAGAG	GCCAAGACCA	AGAGTGACAG	TGGGACAGCT	GCCCGACTT	360
CTCTAGACAT	TGACAAGAAT	GAGAAGTGT	ACCTCTGTAA	ATCCCCTGGTC	CCATTAGAG	420
AGTATCAGTG	TCATGTGGAC	TCCCTGCTCC	AGCTTGACAA	GGCTGACCAA	GGAGATGGAC	480
CTGAAGGGAG	TGGAAGAGCA	CGTTCGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCCGGGC	CTTCATGGCC	TACTCTCATC	TGTATCTGTT	TCCTCTAACT	TTACTGAAAAA	60
GATAGAACATC	ATTAAGCATG	AATTCTACCA	TCTTCTCCCT	ACTACAGCTC	TGTCAAAAG	120
ATGTTGCTCT	CTGAGCCCAA	CTCTCCCTCA	GTCCCCAGGA	TTCTGTCCCT	GTCACACCTT	180
AATCTTTCC	TTTCCTGATT	TTATGTTATA	AGTTATTAG	ATTTCGATGA	GAGATAATCG	240
TACCTAGAGT	ATGGGAGAAC	TATTTAAGGT	TTACAGGTTG	GCTGGAACCCC	TTGTATATAC	300
TAGATGGTAC	TGTGAGGGCT	TGCCACACTG	TCAGCCTCTCA	TCTGAACAGA	GCAGAAAGTG	360
TTTCTGCATG	TTCACCAAGC	CCTGCTGGAC	TGTATCATT	TTCTCTGTGG	GCCAAAACTC	420
GAG						423

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCCGGCC	TTCATGGCCT	AGCGGCCTCA	GATGAATGCG	GCTGTTAAGA	CCTGCAATAA	60
TCCAGAAATGG	CTACTCTGAT	CTATGTTGAT	AAGGAAATG	GAGAACCCAGG	CACCCGTGTG	120
GTTGCTAAGG	ATGGGCTGAA	GCTGGGTCT	GGACCTTCAA	TCAAAGCCTT	AGATGGGAGA	180
TCTCAAGTT	CAACACCACG	TTTGCGAA	ACGTTGATG	CCCCACCAGC	CTTACCTAAA	240
GCTACTAGAA	AGGCCTTGGG	AACTGTCAC	AGAGCTACAG	AAAAGTCTGT	AAAGACCAAG	300
GGACCCCTCA	ACAAAAAAACA	GCCAAGCTT	TCTGCCAAA	AGATGATCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

GAATTCGGCC	AAAGAGGCCT	AGGAGTAAGG	ATGCAGAAAAT	GATTGCAGCA	TATTTCATT	60
TCTACGCAAG	GATGTTCTC	GGAAATGGAG	GCGACATTG	TGCCTGCTT	TTTGAGGGAA	120
TTGATGATGT	TCACTGGAAG	AAAATGGGA	CATTAGTTCA	AGTAGCAACT	ATATCAGGAA	180
ACATGTTCAA	CCAAATGGCA	AACTGGGTGA	AACAGGACAA	TGAAACAGGA	ATTTTATTATG	240
AGACATGGAA	TGAAAAGCC	AGGGGGCAGA	GACATGGTTT	GATTCCCTACG	300	
ACTGTTCCAA	ATTGTGTTA	AGGACCTTTA	ACAAGTTGC	TGAATTGGA	GCAGAGTTCA	360
AGAACATAGA	AACCAACTAT	ACAAGAAATAT	TTCTTTACAG	TGGAGAACCT	ACTTATCTGG	420
GAAATGAAAC	ATCTGTTTT	GGGCCAACAG	GAAACAAGAC	TCTTGGTTA	GCCATAAAA	480
GATTTTATTA	CCCCCTCAAC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

GATGGAGCAG	TTCCAGAAGG	AGAAGGAGGA	ACTGGACAGG	GGCTGCCGCG	AGTGCAAGCG	60
CAAGGTGGCC	GAGTGCCAGA	GGAAACTGAA	GGAGCTGAG	GTGGCCGAGG	GCGGCAAGGC	120
AGAGCTGGAG	CGCCTGCAGG	CGAGGCACA	GCAGCTGCC	AAGGAGGAGC	GGAGCTGGGA	180
GCAGAAGCTG	GAGGAGATGC	GCAGAAAGGA	GAAGAGCTG	CCCTGGAACG	TGGACACCGCT	240
CAGCAAAGAC	GGCTTCAGCA	AGAGCATGGT	AAATACCAAG	CCCGAGAAGA	CGGAGGAGGA	300
CTCAGAGGAG	GTGAGGGAGC	AGAAACACAA	GCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

GAATTCGGCC	AAAGAGGCCT	ACAGGTACAG	AATCATATGA	ATGTTTCTTT	CTTTCTTTCT	60
TTTCTTCTCT	TCTTTCCTTC	TTTCTTCTCT	TCTTTTTTTC	AGACAGAGTC	TTGTTCTGTT	120
GCCAGACTGG	AGTGCAGTGA	CTCAATCTCA	GCTCACTGCA	ACCTCCACCT	CCCAGGTTCA	180
AGCAATTGTC	CTCCCTCAGC	GAGGACCTGC	CTCGAG			216

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCTGGCC	AAAGAGGCCT	AAAAAAAAGA	AGATGGTTT	TTTAAGTCCA	ATATATGTTA	60
TTTTCTTCCTT	TTTGGAGTC	AAAGTACATT	GCCAATATGA	AACTTATCAG	TGGGATGAAG	120
ACTATGACCA	AGAGCCAGAT	GATGATTACC	AAACAGGATT	CCCATTTCGT	CAAATGTTAG	180
ACTACGGAGT	TCCCTTTCAT	CAGTATACTT	TAGGCTGTGT	CAGTGAATGC	TTCTGTCCAA	240
CTAACCTTCC	ATCATCAATG	TACTGTGATA	ATCGCAAAC	CAAGACTATC	CCAAATATTTC	300
CGATGCACAT	TCAGCAACTC	TACCTTCAGT	TCAATGAAAT	TGAGGCTGTG	ACTGCAAATT	360
CATTCACTCAA	TGCAACTCAT	CTCGAG				386

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCTGGCC	AAAGAGGCCT	AGCTGAATCC	TAGATTCAG	CTTCTCACTC	AGAATTAAAG	60
CTGTTTTCAAG	TACCAAGAAAT	ATTTAAGACT	GTTAGTTAA	CTTCTAAGAA	TAGCAGATAAA	120
AGCGTATAGG	TGTTTGAGA	TAACCGTATT	CATAGGAAA	ACAAACATAA	AACTTTCATA	180
ATTTTGGGAA	GAGTTACACA	CAAAAATATC	ATCATTGAAT	AATTAGTACA	ACAAAATGTC	240
ATTTGTTTGT	CCTAAAGGTT	GAATGAACA	GAATCATGAT	GGGAATACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCTGGCC	AAAGAGGCCT	AATTGAATTC	TAGACCTGCC	TATGTCTAT	TCCCTGTGTC	60
CTGCAAGACC	CCCTTTGGTT	TGGTTTTCTT	TTCTTTCTT	TTTTTCTTT	TTGAGACTGC	120
GTCTTGCTCT	GTCTCCCAGG	CTCGAG				146

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GCGATTGAAT	TCTAGACCTG	CCTCTCATCC	ACTATTGTCT	TTCCCCAATT	TTTTTCTAGC	60
CTTATCTTCC	AGAATTCCCTC	TCAGACATAG	GTGGCCCTGG	TTGCTTGATC	CTGTCTCTAA	120

GTTGGTCTTT CATGTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCCGCC	TTCATGGCCT	AGCTGATTAA	AATCTAAAAA	CTGGATAAGA	AGCTGTGGCT	60
TGTAATTAAA	AATAGACCTT	TATTCACTAG	ACCTACAGTT	TGCTTTTTC	ATATGTTAAG	120
AAAAGTTTAA	TATCTTGCT	CCTCTATTCA	GTTCTAGGGG	CACCACTATC	AGTTAACCCCT	180
AAAGATTCT	GTGGGTGAAA	CCATTTGAT	TACCATCTTG	CTCTGCTGCC	AGTTATGGTA	240
ACCAAACCT	CTTGTGTTCT	GGATGCTAAA	TCTGTCCACT	TGTGCCTAA	CTACATCCTA	300
ACTCCCGCA	ACTCGAG					317

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCCGCC	TTCATGGCCT	AGCCCCGGGA	GCCCACCAACA	GTCCCCAGAG	TGTGATAAAA	60
ACAATTTTA	TACTCTTAT	CCTCTTCTAG	TAGTCTACAT	CCCATTCCTA	GTCCTTCCAA	120
TCATAAAAT	TTGTAGTTA	TTTAGTTCAC	ACTTGAAACGT	CCTATGAAAC	TGTTTAAAC	180
CTTTTACCTA	TCTTGTGTTCT	TGTCATTATT	CTTAAGCCAT	TGATACAGAA	ATCAGAAACCA	240
AATTAAATAT	TGTTGTGGGT	ATGAGACAGT	TTCTGTATG	TTTTAATTAA	TTCCCTTAAAG	300
TTTTACTATG	TACTTCATAT	ATACCGGGCA	CTTCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCCGCC	TCATGGCCTA	TGACTTTAA	GTTTCTTATT	ACACTGAGAA	ACACCTAACT	60
ATCCTAATAG	AATTAAATT	CCCTAAGTTA	TAAGACACTT	GAATTTTTTA	AAAAGAGATA	120
ATTAATTTTC	TCTCTATATT	TATTCATT	ATTTTTTCA	TCATGCTCCT	TCTGTATCTC	180
CTATATTTA	TTATATTACT	TACATGGCTT	TATTTTTACA	ATAACTCTTT	TTTTCCCTTC	240
TTTTATTTAT	TTGTTTATTT	TTGGAAACAG	AGTTTCCCTTA	TGCTGCCCC	GCTGGTCTG	300
AGCTCAAGCA	ATCTTCACGC	CTCAGCCTCC	CAAAATTATA	GGACTACAGG	CATGAGCCAC	360
TGTGCCTGGC	CTAAGCCACT	GCACCCGGCG	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCCGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGAAAATC CTACATTGGT	60
CATTGGAAA ATATTGATTC ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT	120
CTACAATATC AGAAACTCAA TTGTTAACAT TTACTACTAG TCTCATCAGA AATGTCTTA	180
AGTATTGTT AACTGGCAAA CTCATAGTGA CGACTACAGG CTTTCAGAA TTTTCATT	240
CATTGAAAGT CTGAATTAA TCAACTATAA ATACTGTCAG TTGTTCCCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCCGCC TTCATGGCCT ACTCTGATAC TAACTGAGT CTACATTTAT ACATTGTGTC	60
TGAATGCTGG TTTTGTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTTT TATCCTGTCT	120
TTTGCTGCTG CTTTCCACCT TCTGTCAGC TCCATCTCA GACAGCTCCC TGATAAACGC	180
TCCACTTCTC GAGTATTCCA GTTGCAGCC TCCCTCAGCA CCTCCCTCAT CATACTGCTAA	240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA CTGCTTTGCC	300
ACCTACTTCC ACACCCCTA CACCACCA GCGACACCCA GCGACACTCG AG	352

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCCGCC TTCATGGCCT ACCGGACCTT GAAAATGAA TGTCAGAAA CACATGTGCA	60
AGGGAGCTGT GCCAAGCTCA TGTGCGAAC AGGCCTCTG ATGAAGCTTC TCAGCGAGCA	120
GCAGGAAGCA AAGGCATTGA ATGTAGAATG GGATACCGAC CAACAAAAAA CAAATTATAT	180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC TCATGAAAGA	240
AGTCCAGGA GATGACTATA AGAACAAACT CATCTCGCA ATATCTGTGA CTGTAATACT	300
AATAATTTC ATTATAATT TTGTCCTTAT AGAGGTAAT TCACATATGC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

GAATTGGCC	TTCATGGCCT	AAAAAATCTA	GTTGAGAAAA	AGAAAGAAC	CAAGAAGGCT	60
AATCACAGG	GTTCTGAAA	TAAAACGTGAT	TTAGATAATT	CTATAGGAAT	TAaaaaaaATG	120
AAAACCTCAT	GTAATTTAA	GATAGATTCA	AACATAAGTC	CGAAGAAGGA	TAGCAAAGAA	180
TTTACACAAA	AAAATAAGAA	AGAGAAAAAA	AACATTGTTTC	AACATACTAC	AGACTCTTCT	240
CTCGAAGAAA	AACAAAGGAC	ATTAGACTCA	GGCACCTCTG	AAATTGTGAA	ATCTCCCAGA	300
ATCGAGTGTT	CTAAGACAAG	AAGAGAAATG	CAATCAGTGG	TTCAACTCAT	AATGACAAGA	360
GACAGTGTG	GTATGAAAAA	CTAACAGAT	GGTGAATGT	GTGACAAGA	TGCTCTGGAG	420
GAAGATTCA	AAAGCGTTAG	TGAAATAGGA	AGTGATGAGG	AATCTGAAAA	TGAAATTACA	480
ATGTTGGTA	GAGCTTCAGG	TGATGACGAT	GGAAAGTGAAG	ATGATGAAGA	GAAGCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

GAATTGGCC	TTCATGGCCT	AGCATTTCAT	CTCTAAATTG	GGGAGAATAG	AAGCATCTAC	60
TTCATGTAGT	AGCCAGGATT	AGAAAGAGGGA	GGAATAACTG	GGCCCTGGAT	AGAATGTGAT	120
GAATGTATAT	TCTTAATGAG	AAGTGGAAAT	AATTGTTGTT	TGAGAGCTGT	GCCTCAGATC	180
AGAGTGACAG	GATACATGGC	TAGGCTATAT	TTTCCAGCAG	ATTAAGAGCT	GCAGCCCAAG	240
ACTCTGAAAT	ATGAAGAAA	AAAGGAGAAGA	TGACAGCATA	TCTTTTTAAA	GAATATTTT	300
CCAGCCAAT	GGTGCAGCAG	AGGACTTCCA	GGAAATTGTT	CTTGTCTGT	ATCAAAGGTG	360
AAGAGTTCGT	AGCCTTCAG	GAAACAAGAA	ACCATGGGAT	GGAGTGAAGG	AAGGTGGCCT	420
GGACCAGCT	GCTGAGCCCT	TCTGAGCCCC	AGTTTCTCG	TCTCTAAAT	GGGGCTGATC	480
TCCCTCCCT	CAGACTGTG	TTGCAGGAAT	AAAAACAGGT	GTTGAGTGGG	CTGCTCGAG	539

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

TTCCACAGCT	CTGATATTCA	GTAACCCATG	TGGAGAACAA	AAGGTTTG	CTCCATGAAG	60
TCTAATTGCC	TGCTGAATAA	ATAAATAAAAT	AGATGAAGCA	CTGCATGCT	TAATGAAAG	120
TAATATTGA	CCCTGCCACC	ATATTTGC	TGGGGTGTG	GCTGAAGTGT	GCTGGCAGGT	180
CCATCAGTC	AGAGTCTGCC	AGCCAGCAA	GCAGGAGAGA	CAGGAATATC	AAAAGGCAGC	240
TCCTGCTTGT	GCCTTAATCT	TTGTCCAACC	CCCAATTCT	CCACCAACAGG	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:841:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTCGGCC	TTCATGGCCT	ACCTTATTAG	TGATTGGCGA	TTCAGGCCAT	GTCATAGGGC	60
CTTTCAGACA	AAAGGTTCTT	ATCCCAGTC	GCTGGCCAAA	ACATTAACATT	TGGATTTCTT	120
ACCCCTGCTAC	AGCATCTTCT	AGAACGGCAG	CAAGATAATA	TTGTGGCAGT	GCACAGATAAA	180
CATCAGGGTA	GACTTGACTG	GAGAAAACCA	AATTCTGGC	TTGCTCTGT	GTGCCCAT	240
CCAGCTGTGC	ATGCACACAC	AGGACACCTT	TCTAGTATGA	AGAACTTGCA	TCATGTCTGC	300
CCTCTATTGA	GCACCCCCCTT	CTAGAAATAC	TTCCAAGTAT	TAGCATGTGA	ACTGTTGACT	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:842:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCTG	ACTTATGAAT	TCTTTCTGTG	TGATCGTAAA	60
AGTCAGAGT	TTATTGCAAA	GAGAATCTTC	ATCTGAATCC	TCAGCCCTGGG	AATCTTCCTC	120
TTCCACCGCC	AACTCCTCCA	CCCAGTCTGA	GTCTACTTCA	ATGGCCCGCT	CTTCCCCATC	180
CGCACTCGAG						190

(2) INFORMATION FOR SEQ ID NO:843:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 627 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

GAATTCGGGC	TTCATGGCCT	AAGCTCCGCG	AGCCCCCTAC	AACTCGTTTC	CTTCCGTTCA	60
CCTTCGCAGG	GGGGCGACTG	GCGCGCGAT	GGACCTGACC	GGGCTCTGC	TGGACGAAGA	120
AGGCACCTTC	TCCCTCGCCG	GCTTCCAGGA	CTTCACGTT	CTCCCAAGGAC	ACCCAGAAGCT	180
GAGTGGCCGG	ATCCGAAGGA	GGCTCTACTA	TGGCTGGAT	TGGGAAGCCG	ACTGTAGCCT	240
GGAGGAGCTC	TCCAGCCCGG	TGGCAGACAT	TGCTGTCGAA	CTGCTCCAGA	AGGCAGCCCC	300
CAGCCCTATT	CGCCGACTCC	AGAACGAAATA	CCTAGCTCAT	GTGTCCCCGG	AGGCATGCAT	360
CTCCCCATGT	GCTATGATGC	TGGCTCTGGT	GTACATTGAA	CGGCTCCGGC	ACCGAAACCC	420
AGACTACTTG	CAGCATGTGT	CATCTCTGA	CTTGGTCTTG	ATCTCCATGA	TGGTGGCCAG	480
TAAGTACCTC	TATGATGAAG	GGGAGGAGGA	GGAGGTCTTC	AACGACGAAT	GGGGAGCTGC	540
TGGGGGTGTG	GCCGTGCCCA	CTCTCAATGC	CTTGGAGAGG	GGCTTCCCTGA	GTGCCATGGA	600

TTGGCATCTC TACACTGAAC GCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

```
GAATTGGGCC TTCATGGCCT ACCTGAGCTG CCGAAGCCGC CGTCCTGCTC TCCCCGGTGG
GCTTCTCTAA TTCCATTGTT TTTTTAGAT TCTCTGGC CTAGCCGTCC TTGGAACCCG
ATATTGGGC TGCGCGGTT CGCGCGCTGG GCCTAGGGC TTAACAGTAG CAACAGAAC
GGCGCGGGCG GCAGCAGCAG CAGCAGCAAT CTCTTCCGA ACACGAGCAC CACAGGCC
CGAAGGCCGG AACAGGCAGTT TAGAGAAAAT GGCAAGACGAT ATTGATATTG AAGCTCTAGC
TCGAG
```

60
120
180
240
300
305

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```
GAATTGGGCC TTCATGGCCT ACCAGAAAAA ACTTACATTG AAGAGAGGAT TCCTTGTTT
GACTATGTT GTTTCTGGCG GTTCTAGGCAG CCAACGTAG GGTTCATG GATCTGGAGG
ATTATGCACA CTAGTGTGA GTTTCATGGC AGGGACAAAA TTGGTCCAAG AAAAGATGAA
AGTCCAAAAG ATTATTACGA CTGTATGGGA TATTTTCAA CCACCTCTTT TTGGTTTAGT
TGGAGCAGAA GTATCTGTT CATCGCTTGA ATCAAATATT GTTGGCATAT CTGTGCCC
TCTAAGTTG GCATTATGTG TTCGAATTAA ACCACACATAT CTATTGATGT GCTTGCTGG
TTTAGTTT AAGGAGAAAA TATTTATTGC TTTAGCATGC ATGCTCGAG
```

60
120
180
240
300
360
409

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```
GAATTGGGCC TTCATGGCCT AGGCACGGTA CATACTGATTA TTATAAACAT CAGCTGCGGT
TCTGGGAGTG AGCTTGTGTC GTGTTAGTGC CATCTCCCTG ACAAACTCTGA CCTGTACCCA
CATCTCAGGC TGCGGAAGGAG TAGCTGGGC TCCCTTTAAAT GCAGCCGCAC TTGGTTGGGT
CACAAAGAGCT GGTTGATCA ACCCTGACT CCCCTGGCG GGAGGTGCTC GTCACATCTG
GGAGCTGAG CAGAGGTGCC GGGGCTTGG AAGCTGGAGA AATGATGGAT CTTTCTCCAG
GAGAAACAAT TCTTATCTTC ACATCNGCCC CGTGTCCAA ATGAAGAGCG CGTTGCTATA
```

60
120
180
240
300
360

GCTGCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

GAATTCCGCC	TTCATGGCCT	ACGCAGCGGCC	GAGCGGAGGC	GGAGTCGGCG	CCGAGAACAT	60
GGCTGGAGGC	AAAGCTGGAA	AGGACAGTGG	GAAGGCCAAG	GCTAAGGCAG	TATCTCGCTC	120
ACAGAGAGCT	GGGCTACAGT	TTCCTGTGGG	CCGCATCCAC	AGACACTTGA	AGACTCGCAC	180
CACAAGGCCAT	GGAAGGGGTGG	GTGCCACTGTC	CGCGTGTAC	AGTGCCTGCA	TTCTGGAGTA	240
CCTCACTGCA	GAGCTGCTGG	AGCTGGCAGG	TAATGCTTCT	AAGGATCTCA	AAGTAAAGCG	300
TATCACTCCG	CGTCACTTGC	AGCTTGCAAT	CCGTGGTGT	GAAGAGTTGG	ATTCTCTTAT	360
CAAGGGCTACC	ATAGCTGGGG	GTGGTGTGAT	CCCTCACATC	CACAAATCTC	TGATTGGAAA	420
GAAGGGACAG	CAGAAAAACTG	CTTAGAGGGG	TGCTTTAAC	AACCTCTTCC	TTCCCCGTCA	480
TTGTACTGTA	ACTGGGACCT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

GAATTCCGCC	TTCATGGCCT	AAACAAGCAG	AGGGACTCCC	CAGATAGCTT	CATAACCCAGT	60
TTAGCTTTAT	ACAAGTGTA	GTGTTAGGCT	CTGCTTGGC	ATACTTGAGA	GCACAATGGC	120
TGCTTCAAAA	CAGGCATTTG	AACTCGTGT	TTAATCAAAT	TCTTCTTAA	TCTAAAGTGA	180
GTTCCTCAT	GAGAGCATAT	ACACTTAACC	CTTGAACAT	GTAGGGTTG	GGGTGGGGAG	240
TCAACCCCT	GTGAAGTAA	AATTTGCTAA	TAACCTTGA	CTCCCCCAGA	ACTTAACTAT	300
AAATAGCCCTA	CTATTGATTG	GAAGTGTTAC	CAACAGCATA	CACAGTTAAC	ATATAATTTG	360
TATGTAATAT	GTGTTATCCA	CTATATTCTT	ACAATAAAGT	TAGAAAAAGA	AAAAATGTT	420
ATTAGGAATC	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

GAATTCCGCC	TTCATGGCCT	ACATGAGCCC	AGGAGTTGAA	GGCTATAGCC	TGGGTGACAC	60
AACAAGGCC	CATCTCTAAA	AAATATATAA	ATAAATAAAG	TTAAGGATGC	TGCGTGGTTT	120

ATATGTTAG AAGAGATTG AGGTAATAAA AGAGTTTTG GCCAGGCCT GGCTTACACC	180
TCGGCCTCCC AGAGTGTGG GATTACAGGC ATGAGCCACC GCGCCAGCC GGAAGTAGGT	240
TTTTGAAGA GTCAGCTGAA AACAACTGTT GCCTATTG GAATTAAAAA TTTTATTG	300
AAAATATTAT AACTGAGAAA TTATTGTATA TATTATGGT ATACAGCTG ATGTTATGAT	360
ACATGTATAC AATGCAGAAT GATTAAATCA AGCTATTAA CATAGCTGCC ACCTCAAATA	420
CTATTTTGT CGTCAGAAAT TTGAAATTAA TTATCTCAGG AATTTGAAA TGTACAATAC	480
ATTATTATTA ACTGTTCTCG AG	502

(2) INFORMATION FOR SEQ ID NO:850:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCCGCC TTCATGGCCT AGATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA	60
CAGAAGATAT ACCATAAATA TTTGGCACAG AGACGTGAGG AAGAAAAGC TCAGGAGAAA	120
GAATTGACA GAATATTAGA GGAAGACAAG GCAAAGAAGT TGGCTGAGAA GGACAAGGAG	180
CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTATGTG TACAAGAAAA	240
CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAAGAAC AGGAACCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:851:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GGTTCTGTAT TCTGTTGGTT GGAGTGTCT ACTATTGTTG GGTGGAGTGT TCTATCTTCT	60
GTTGGGTGGA GTGTTCTGCT GTTGTGGGT GGCCTGTGT ATATTCTGTT GTTGGGTGGC	120
GTGTTGTATA TTCTGTTGGT GGGTGGCGTG TTCTATCTTC TGTTGTTGGG TGGATGGATT	180
GTTCTGTATT CTGTTGGGTG GCATGTTCTA TCTTCTGTT TTGGGTGGAG CCTCTATCT	240
TCTGTTGGGT GGCGCATTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG	300
GGTGGCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:852:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 532 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCCGCC CTTCATGGCC TAGTCTCATC TCAGAGTACT CAGAGAAACT ATTTTTAAAT	60
CTCTAGATAT CAATCAATGA ATATTATTA TTAAATACCT GCTATGTGCC AGATGGTGT	120

AATTATAAGT TTGTTCTCTT TTTGTCGTGC TACTTAGGCT TTTATCATTT TGCCCTATCA	180
TTAGGGAAAGT GGCTCCNNNN CTTACAGCTA ATTTTTTTT CAATTACTA ATGACTTTTT	240
GTGGAGGTGG GGATCTCTTC TGTTCAACAT TTTCTATGAT TCATCTCAAT CCTCCAGTGA	300
TTATTAaaaa ACAGTTGCAG TAAGTTCACT CATAGGGCA CTGGAATGAG TCCTTAAAC	360
TTTATGCTGC TGCTTTGCA ATGATGGATT GCCTGAGAAT TAAGGAAAGA TAACTACTCT	420
CCTGGTCACT GTATTCCAA TCAACCATAT CCTCCCAGAA TATGATTCTC TCCCTCAGGC	480
ATTTAGAAA AGAGACAAGA GACAGATTTC TTTTTTCAGG CAATGACTCG AG	532

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

GAATTCCGCC TTCATGGCCT ACTTTTTGAT AAGCAACTAG TGGTCTCATT ATCAGAGGTC	60
CCTGAGGGCC CCTACAGGCC CCCCCAGGTT CTGCCCCAA GATTCTAAGA GAGACCTTGT	120
GCTAGGGCTC TAATCTTGAT GTTCTTGCA TTGTTTGAT ATGAAGCCCA GGATATGTGG	180
GCACAATAAG GTAATCATG AGATGTGAAG GAGAACGAG ATCAGGCCAG AGTCACCAT	240
TCATTGAAGA GCCAGAGAAA AAGAAAATTAA GTGACAGAT TTGTGTAGAT TTACAGAGAA	300
CTTCTATTTG CTGCAAGAAC TTCATCAGGC GCTGACCAT TTCTGATTG GAAAGGAGCT	360
TCTTTGGGCC CTGATAGAAC TGAATTAATA TGAAGAAATT GAAGTGGCTC TCGAG	415

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

GAATTCCGCC TTCATGGCCT AGTAAAATTAA GCTGAAAAAT AATTTCCAA TGCAAATACT	60
AATGAGGGTT ATATGACCGT TGTCAGACG ATTTGCAGTG CTGCATGACA TTTGTCCTAA	120
AACTGACTC TAAACACATT CCTTGTGAAA ATAGAAATAT TCCCATGCT AGATTCCAA	180
TAATAAAAGA CACTGAGAGT GTTTCAAAA TTAATGGACT GATTTAAATT TCACTGGAAA	240
GCAGCTTTT AAAACTAAAT TGTCTGGATG TGGCCTCCCT GTGATCACTT CCAACTGCTT	300
ACTGCCAACT TCTGGCGGCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

GAATTGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT	60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAATTCCCT	120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC	180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAA CTGTTTCGGG GAACGCCCTC	240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGGCTC	300
AGCCTGGCA TGTCAGGAGA GCCAGCAGCC ATTCCCCCA CTGGCAGGGC GTGTTTATAC	360
TTCTGAGTC TAAGGCTCTC TGAGGCTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA	420
TTTGGTTGCC TCTCCAAAAT CTCTTGAAAC TTCTTCCTT CGTATTCAAC TGACTGCTGC	480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTGGCCA TGTCACCTT CATTAGGTCC	540
AACACAGAAA AAAATTCTCT GAAAAGGGGC ACTATTCCTT TAATGTCCTT TAGTTCTTA	600
ACTTCCTCAT CTCGAG	616

(2) INFORMATION FOR SEQ ID NO:856:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTCAA	60
GAAGTTGCCT TGCTTGTATA CTGCAAATTG AGTATTGTG CACTGGAAAT ATAAAAAGAT	120
GTTCCACTTT CTTTTCAGCC AGAAAGCTTC CTCGTTGTGT GTGTGCGGTG GTGTCCTAC	180
CTATTGCCGTG TTCTTTCTAA ATCTACATT TGTTACCTTA TCCAATACCTT GCTTAGCAA	240
GAACATTATG GGGCCCAACCA TATTCCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG	300
TCAAGGAAGA AATCAGAACAA ACCCTGTGA CCATTCACC TCCCTTGATC TTGGGCTTGG	360
GTGGAAAC TGACCAAGCAA GCTGGAGCTG CCACCCACAGA GAAACATCAA AGCAAAAGGG	420
TTCCAGGACC AGAGATTAGG TAACTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT	480
CAACAAGCAC CCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:857:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

GTTCATGGCC TAGATGCTGG TTTGTTTTTG TTTTCGTTTT TTTGAGACAG TCTTGCTCTG	60
TGACCCGGGC TGAGTGCAG TGTTGCGATC TCGCTCATG CAACCTCTGC CTCCCAAGTT	120
CCAGCAAGTC TCCTGCCCTCA GCCCCCCCACCA GAGTAGCTGG GACTACACGC AAGTGCCACC	180
ACGCCAGCT ACTTTTGTA TTTTAGTAG AGATGGGTT TCACCATGTT GGCCAGGCTG	240
GACTCGAATT CCTGACCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:858:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

GAAACTATAA TCATCACTAC TGTAAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA	60
GCTATGGGAG ATCGACTAAC CGCAATGAAA GCAGCTTCC AGTCACACTA CAAGAGTCAC	120
TTTGGTGCAG CCAGTTAAC TAATCAGAAG GCTGGAAGTT CTGCTGCTGG GGCAGAGTGGG	180
TGGACTAGTG CAGGGAGCTT GAATTCTGTT CCAAACAACT CAGCACAAACA GGGCCATAAC	240
AGTCCCTGACA GCCCCGTCAC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC	300
AACATCAGTC GTGCCCTGT GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAAACACA	360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT CGGGGCAGCA ACAGGAAAG AGAGAGATAT	420
ACTGAGAACCG GGGAACTCGA G	441

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

GAATTCCGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCAATGGC TCCGGAAATCA	60
AATTGGGCTC AAACGGGCCA AGCTCCAACA CAGTGGAGCC TGGCGCTACT CCCACCTCCA	120
CCTTGGGAT CTCAGAGCTG CAGGATGGCT CTGCCAACCG CACCTGAGC TGGCCCGCT	180
TGGGGCTGGC ATTGGGGAC AGTGTGTTCT GGGCGTCTCT GCTCCTCTCT GCTGGTGCCT	240
GTGCCCTGTC TGCCCCCCTCA CTCATAGATG TCAGAGCCAC AGGACGCCCG CGCAGAATCC	300
CTGCCGCCAC CCTGCCGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC	360
ATGGGCACCT CTGCTCTTCT CGAG	384

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

GAATTCCGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCGC	60
CCTGAAGAAG GAGAAACGAA AGAACCGTCG GCAGGAACCT GCTGACTGA GAGACTCAGG	120
ACTCTCACAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAAACAC TAGAAGAAGA	180
GAAGCTATTG GAAAGAGAGA GGCAAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA	240
GGCACAAAGAA GAATTCAAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAAA AAACGGCAAG	300
AAGAACAAAGA GAGAAAGTTA AAGGAACAAT GGGAAAGACA GCAGAGGAAA GAGAGAAG	360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTGCAG AAGGGCTCGA	420
G	421

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

GGATTCTTT GGAATGGCA AAGAACTGGG GAATCTGCTA CTGGAAA	ACT CACAGCTTCT	60
GGAAACAAA AACGCCTTGA ATGTGGTGA	GAATGACCTG ATTGCCAAGG TCGACCAGCT	120
GTCCGGGAG CAGGAGGTGC TGAGGGCGA GTTGGAGGCT	GCTAAGCAGG CCAAAGTCAA	180
GCTGAAAAC CGTATCAAGG AGCTGAAAGA GGAACTGAAA	AGAGTGAAGT CCGAGGCCAT	240
CATGCCCGC CGTGAACCCA AAGTTCTCGA G		271

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

GCGGCTTTT GGGAGGTGGT CAGGGAAAA GATGGTCAGT GCTTTTTCTG	GACAAATCCA	60
GGGGCAATT GAGGTGGGA GTCTATGAGA AGGGCCCTGT CAGCTGAGGC	GAGGGAAAGG	120
GCAGAGGACC TAGAATAAAA GGATATGCC TCTCTGTGCA CTAGCAGGAT	GGCTAGGAAA	180
GGGAGATATG AAAAGACGAA ATGGGGACCG GGTGCGGTGG CTCACGCCCTG	CAATCCCAGC	240
ACTCTGGAG GCCAAGGCAG GCAGATCACCC CGAACGTCAGG AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

GCTCGAGTGG AATGGGCCGA GGAGATGGAT TTGATTCTCG TGGCAAACGT	GAATTGATA	60
GGCATAGTGG AAGTGATAGA TCTTCTTTT CACATTACAG TGGCCTGAAG CACGAGGACA		120
AACGTGGAGG TAGCGGATCT CACAACCTGGG GAACTGTCAA AGACGAATTA ACAGAGTCCC		180
CCAAATACAT TCAGAAACAA ATATCTTATA ATTACAGTGA CTTGGATCAA TCAAATGTGA		240
CTGAGGAAAC ACCTGAAGGT GAAGAACATC ATCCAGTGGC AGACACTGAA AATAAGGAGA		300
ATGAAGTTGA AGAGGCTCTT CTCGAG		326

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GGAAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTT TGAGCAGCTG GCACGTGCCT	60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG	120
AGCTGGATGT GAGAGTCTCC TGAGGACCT CGGTATACTC AGAGCATTTC CTCTCAGGGT	180
GCAGGAAGAG GAAAGCAGAG GAAGTGGACT TGAAGGACCA AAGGTGGAT CCTAGCTGGG	240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTC CCTTCTCTGA GCCTCAGTT	300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT	360
TAAATGAGTT ATGCCATGGA AGTGCCTAC ATTACCCATT GATAATGCTC CAGTGGCCTC	420
TCAATGAAAT GGAGTGTGAC AGAGTGCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT	480
GCTGGACTA GAAACCGGGC AACCTCGAG TGCCATGCC TACTGCATCA CTACGCCAC	540
CTCGAG	546

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTGGCC AAAGAGGCC AAGGATTCA AGTATAAATC TTTAATTAT CACAGTCTGT	60
ATTAAGTAAT ACTAAACCAC TTGCGATATA AATACATCAC AACAGTATAC TTCCGTTAT	120
GCTATCTGG TCTTGTACT TTGTTTTTG TACATTTAC TTTGGCATAA ATGTCAAAGT	180
ACAGTATTGT TATTTAGCTT TAAATATTCA TTGCGCTCTC TCCTTAATGT AAAAAGGCTT	240
CTTCTCAACT TCTTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC	300
ACACTGTTCT GTACTGTCCT TTATTTATT TTTTTTTTTG AGACGAGCTC	360
GTTCTTGCC CAGGCCGGAC TGCAGTGTT CTATTTGCGC TCACTGCAAA CTCTGCTTCC	420
CGGGTTCACG CCATTTCCC GCTTCAGCTT CCCGAGTAGC TGGGACTACA GGCGCCCGCC	480
ACACACCCG GCTAATTTTT TGTATTTTA GTAGAGATGG GGTTTCTCCG TGTAGCCAG	540
GATGCTTG ATCTCTGAC CTCGTGATCC GCCCACCTCG GCCTCCAAA GTGCTGGGAT	600
TACAGCGTG AGCCACCGCA CCTGGCCTAT TCTGCTCTT TTAAAGCAG TTCTCTTTA	660
AAAAAATTGTG GTAAGATATA AATCACATAA AATTGAGT TATAACCATT TTAAAGTATA	720
TAATTCCATG GCATTAATTA CAGTCACAGT CTTTACAAAC TATTATTACT ATGTATTCCT	780
AAAGTTTTT TACCCCTCCCC CCCTCGAG	808

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTGTAGGATG AAAAATGAAA	60
ATATAAAATA AAGAAGAAAA TCTCGGGAG TTTAAAAAAA ATGCCTCAAT TTGGCAATCT	120
ACCTCCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAAGG TTTCTAATG AAAATTTTA	180
AAAATACTGT CAGTATTCTA AAATTTCAA CAGTATTATA AAAACATTGC ATCTCCCCAC	240
CTCTAATATG CATAATATT TTTCTGCTA AAATGGTT CTACAATTGA GTAAATGGCA	300
AATACATGAA GCATATGTCCC TAAATTTAT AAAGAAATTA TATTTAATGC ACATTCGAG	360
G	361

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

GAATTCCGCC	AAAGAGGCCG	GAATTTGCC	CTCGAAGCCA	AGAATTCCGC	ACGAGGAAAA	60
CAGTCCTTAA	ACCTTCAAA	ATGCCACAAT	GTGCATTATA	GATTGCCCTT	AGTTTCCCAA	120
CTCTCAGTAT	ATAGAGACTC	AATTAGAAAA	GAATGGTGC	TAGTAGCTTC	AAACCACTGG	180
TATGTATTG	AGGAACGTGTT	CCTGGTAGAA	GGCAGTACCG	TGTCCCTTGG	TATTGCTACT	240
GTGCCCTGCTA	TGTTACTTCT	TTATGTATAT	GATATGGAAG	TAACTCCCTT	TATACATGTG	300
GAGAAGTTTC	ACAGCTTTTT	TTCATAGTC	TTGCATTAAA	ATGTCTGCTG	AGGCTGGGTG	360
TGGTGGCTTA	CGCCGGTAAT	CCCAGCACTT	TGGGAGGCCA	AGGTGGTGG	ATCACCTGAG	420
GTTGGGAGTT	CAAGACCAGC	CTGACCAATA	TGGTGAAACT	CCGTCTCTAC	TAAAAATACA	480
AAAATTAGCT	GGGTATGGTC	GCGCACACCT	GTAATTCCAG	CTCCCGCCGG	GCGACTCGAC	540
CAAAGAGGCC	GGAAATTGGC	CCTCGAACGCC	AAGAATTCCG	CACGAGGGGT	ATTTTATTTT	600
TTANTTNTTC	TGTTTCTCTC	TNGAGTGTAT	AGTGTAGAGG	GGGTTTCTGT	CTTGAGTGT	660
GGCCTGGAGA	TTTCCCTTAT	ATGGTACAAA	CCAGCAATGA	ATTAAGAGT	CTCTTTCTC	720
CAAGATCTAG	TGTTTGTAC	TAGGAGAACT	CTAAAAAGTA	TCTATTTCAC	TGTAGTGC	780
AAGTACAAAT	TTATTTGGAT	TTATTTTTTG	CCATCTTATT	TTTTAATATA	TTTCTTTTC	840
TATGTTGTGC	TTCTTTCCCA	CCTCATCTCT	CCTCCCTCGAG			880

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

GAATTCCGCC	TTCATGGCCT	AGTCATGGCT	TTAGAATCTG	GAGAAGAGTC	TGACTCACTT	60
CTTTCCTGAG	GGGATGCACT	GGGTTTCACA	TCAAGTTCTT	GAGAGGATCC	CGAACGACTT	120
CTCTGCCCTA	GGGGAGTCCG	AGCCACAGTT	TTCTGATCAA	CTGATGATT	TGACCCGCTT	180
CTTTCTCTCT	GGGGGGTAAG	ACACTTGTG	TTGAGCTCTG	GGGATGATGG	AGAACGACTC	240
CTCGGCCTAG	GAGTCTGAGG	CAAAGCTTTC	GGTTCTGGGG	AAGAACATACA	TCGCTTCTC	300
CCTCTAGATG	GGCTTCTAGG	TATATCTTC	ATTCCAGGAG	AGGACCCAGA	CAGGCTGTGC	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTGGCC	TTCATGGCTA	GAGGATCTTC	TCCTGACCCA	GCATCGCTCA	TCACAATGAA	60
GAACCAAGAC	AAAAAGAACG	GGGCTGCCAA	ACAATCCAAT	CCAAAAGCA	GCCCAGGACA	120
ACCGGAAGCA	GGACCCGAGG	GAGCCCAGGA	CGGGCCCAGC	CAGGCGGCTC	CTGCAGTAGA	180
AGCAGAAGGT	CCCGGCAGCA	GCCAGGCTCC	TCGGAAGCCG	GAGGGGGCTC	AAGCCAGAAC	240
GGCTCAGTCT	GGGGCCCTTC	GTGATGTCTC	TGAGGAGCTG	AGCCCCAAC	TGGAAGACAT	300
ACTGACACCA	TACTGTGTGG	ACAATAACCA	GGGGGGCCCC	GCGGAGGATG	GGGCACAGGG	360
TGAGCCGGCT	GAACCCGAAAG	ATGCAGGAA	GTCCCCGACC	TATGTGGCAA	GGAAATGGGG	420
GCCTGAACCA	ACTCCAGTAG	TCAATGGAGA	GAAGGAACCC	TCCAAGGGGG	ATCCAAACAC	480
AGAAGAGATC	CGGCAGAGTG	ACGAGGTCGG	AGACCGAGAA	GCCCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTGGCC	TTCATGGCCT	AATTTGAGCT	TCAGTCTCC	ATGTGTATAA	TGTGGGGTTG	60
ATGCTGTGGT	GCTCCAAGGT	GTTGGGGGGT	TTTAGGCAGA	GTTCTTATGC	TTAATATAGG	120
ATGAAAAGT	CTTCGAGCTT	CTTCCCTTTT	CTCTTTCTTC	TCTTCATCTG	ACATGAGCCT	180
GGGGTTCTAC	CTCTTCCAGA	TAATTCTCATC	TGGAGCTACT	AATTCTATCT	CCCCATTGAT	240
TTTAGTGTCC	TGTCTGTTTC	TAAATCTACT	GGCAGTTGG	AGACATGTG	TTTTGTTCCC	300
TCATCTATCT	TCTGTATCCA	CAGTTGATAA	TTGTCTATGT	TTTTAGTGTG	TTTTAAGGAA	360
						372

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTGGCC	TTCATGGCCT	AGGTGGTGGG	TGCCTGTAGT	CCCAGCTACT	TGGGAGGCTG	60
AGGAGAAGA	ATTGCTTGAA	CCCGGCAGGC	AGAGGTTGCA	GTGAGCTGAG	ATCGTGCCAC	120
TGCACTCCAG	CTCTGGTGA	AAGACTGAGA	CTCTGTCTCA	AAGAAAAGAA	ACAAAAAAATT	180
ATGTACACAA	ATATGGACAG	CACTGGCAAG	AAGTGTGGCA	AAAACACATG	TGGTTCTCTT	240
GTTTGGGCT	CAGACATGTG	GCTGTGCCAT	TACAGACCCC	CGGGATTTAG	AATCCTCCCT	300
CTGAAAGGCG	TCCCTGTGCA	TCGTGAGCAC	CAGCCTGAAC	AGATGAAAAG	GCTGAGCTGG	360
AGGGGCTGGG	ACACAGCCCA	CCTTGACGAC	AGCTGCTCT	GGCTGTGCGG	GGGGGTCTCC	420
AGGAAAGGCC	ATTCTCCAC	TAGGATGCGC	AGGCCCTACT	GAGGCTCAAG	CTCCCTTGCT	480
GTTTGGAAATC	TTCCCTCCCC	AGCCCCCAG	CCTCATCAA	GGCTGCCCTT	TCCTGTTCAC	540
TGACCACAGC	TGCTTGACT	CCATTAGCCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTGGCG	TTCATGGCCT	ACCAGACTAC	TACGGACTCA	TCTAACAAAA	CAGCACCGAC	60
TCCAGCATCC	AGTGTACCCA	TCATGGCTAC	AGATACAGCC	CAGCAGAGCA	CAGTCCCCAC	120
TTCAAGGCC	AAAGAAATCT	TGGCCTCGGT	CAAGGCAGAC	ACCCGGGTG	TATCCAGTGA	180
CTCACCGGGG	ACTACAACCC	TGGCTCAGCA	AGTCGCAGGC	CCAGTCAACA	CTACCGTGGC	240
TAGAGGAGGC	GGCTCAGGC	ACCCACTAC	CACCATCGAG	AGCCCCAGA	GCACAAAAAG	300
TGCACACACC	ACTACAGTTG	CAACCTCCAC	AGCCACAGCT	AAACCTAACCA	CCACAAGCAG	360
CCAGAAATGGA	GCAGAAAGATA	AAACAAATTG	TGGGGGAAA	AGCAGCCACA	GTGTGACCAC	420
AGACCTACA	TCCACTAAGG	CAGAACATCT	GACGACCCCT	CACCTACAA	GTCCACTTAG	480
CCCCGACAA	CCCACTTCGA	CGCATCCTGT	GGCCACCCCC	AACTCGAG		528

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTGGGCC	TTCATGGCCT	AAGCTGCACA	AAACGTAGAA	AGAAGACATA	GCGCTGCCA	60
GGGAATAGG	AAATGAGGGC	ACTTACACAT	TAATGTGAAT	TAGTAATTGT	GGTATAGAAA	120
TGTTTATAG	TGAAAGATTC	AAATTGCTT	TTCAAGAAAA	ATGCCAAAG	CTATTTAAAT	180
AATTGAGGT	TACATCTAG	GTGGGATTT	TTCTCAATT	AAGATACAGA	AATACAGCAA	240
GCCTTAATAT	AAAGTTCCCT	AAAGTTCTT	CAAGTATT	TAAAGGTGGA	GAATGCAGG	300
AATTGATATAA	CCAGAAATGTT	TTCTGCCTTT	AGCTTTTCAG	AACTTGAGAT	GTGGCAGCAC	360
TGGACTGGGT	TTTTTTAAAT	GTTAGGACTA	GGAATGTTTG	CTCTGTTAA	TTATGAATTA	420
ATTGATTATT	AAGTTTAGAA	TGCATTTTA	CAAGTATCTA	ACTATCAAAT	TGTGTTAGT	480
AACTTGAGTG	TATGACAAG	TTTGATCAAC	AGCAAAATAG	AGTTCTGAAT	TTCTTTAAAT	540
GTGATGATAT	ATTATTTGT	GAAACTTTGT	GTTTGAAAAT	GTTTATTCT	GTTTATGGTG	600
TAATACTCGA	G					611

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTGGGCC	TTCATGGCCT	ACGAGCGGTG	AAGGAGGAGA	CCAAGGAGGA	TGCTGAGGAG	60
AAGCAATAAA	TGCTTATT	TTATTTCTT	TTCCCTCTT	TCCTTCCTT	TTTTAAAAAA	120
ATTTTACCCCT	GCCCTCTT	TTCGGTTGT	TTTATTCTT	TCATTTTAC	AAGGGACGTT	180
ATATAAAGAA	CTGAACCAA	CATTCAAGGT	GTTTTTTTT	TTGTTCTAA	GTTTTGCC	240
TATTGAAGAT	GACTTCAGAA	AATCCATTCC	CCAGTCATGA	AAATGTACTG	TGCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GAATTCTGGCC	TCATGGCCTA	ACGGCAGCGG	CAGCCTCTGA	AAAGAACATCGG	GGCCCAAGAA	60
AAGGCCTCG	TGTTATCGCT	CCCAGGAAGG	CGCGCGTCGT	GCAGCAGCAA	AAGCTCAAGA	120
AGAACCTAGA	AGTCGGAATC	CGGAAGAAGA	TGAAACATGA	CCTGGTGATG	AAAGCCAGCA	180
GCAGCCTGCC	CAAGAAGCTG	GCACCTGCTGA	AGGCCCCAGC	CAAGAAGAAA	GGGGCAGCTG	240
CCGCCACCTC	CTTCAAGACA	CCTTCCCTGAG	GACGCTGGCC	CCAGTGCAGG	CCAACATCCC	300
ACCCCTTACCC	TCCATATGGG	ACCTTGAAG	TCATCCACT	TCTTCGAG		348

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 586 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCTGGCC	AAAGAGGCCG	GAATTGGCC	CTCGAAGCCA	AGAACATCGG	ACGAGGGAGAC	60
TATTTCCCAT	TTACACACAAG	AAATCTTGA	TTATTCAGTA	AAAAGAGGAA	ATATAAGAAA	120
AAAAATCAGA	CTAGTCTGGC	CAACATGGTC	AAAAAAATACA	AAATTAGCCA	GGCATGGTGG	180
CGGGCGCTG	TAATCCCAGC	TACTTGGGAG	GCCCAAGCAG	GAGAACATCGCT	TGGACTCGGG	240
AGGCGGAGGT	TGCACTGAGC	CGAGATCATG	CCACTGCACT	CCAGCCTGGC	AGACAGAGCA	300
AGACTCCCTC	TCCAAAAAAAG	TTAAAAAAAGA	AAAAGAAAAAA	AAAGGCCGGG	TGCACTGGTT	360
CGGCCTCCCA	AACTGCGGGG	ATTACAGGGC	TGAGGCCACCA	TGCCCCGCCA	CTTTCTGTAT	420
TTTTTAAATAA	ATAAGAAATA	CACATTTAGT	AGTACTTACA	AAGATCTGTA	GGCCGTAGCA	480
AATATTCACT	AACTGGAAGA	TGCCAATGAA	CATTGTTGGG	TAGTATTAA	ATAACAAAAT	540
GTTCAAATAT	TTGACAAGAT	TAACAACACT	ACACGGCTT	CTCGAG		586

(2) INFORMATION FOR SEQ ID NO:877:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCTGGCC	AAAGAGGCCG	GAATTGGCC	CTCGAAGCCA	AGAACATCGG	ACGAGGGTAA	60
TTTTAAAAAT	TTATGTATTT	TCTAGCATT	GCCTCAAGGA	TTGAAATTAA	TTTTTTACT	120
TGTGTTTACA	GGTACAATTTC	TTTATTTAAA	AAGTCAGTGT	AAATATCAAAA	CTATTTGATA	180
TTCTTCAGAC	TGGAATATTA	TTCTCTAGTG	TAGAAGAAA	CATTTCTGCA	TTACAAAACA	240
AATAGTAAAT	ACTCTAAAT	AGGGGTTGGC	AAACTTTCT	AAATAAAAAG	GCCAGATGGT	300
AACTATTTA	GTTTTGTGG	CCCATGTGTT	GATAACTATT	TTAGGTTTG	TGGGCTACGT	360
ATGGGGTCAC	TCTCCCATTC	TCTCTCTCTC	TCTCTCTCTC	TCTCTCTCTC	TCTCTCTTTC	420

TGTGTGTG AGCGCGCTC TCGAG

445

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAATTCCGCC	AAAGAGCCGG	AATTTGGCCC	TCGAAGCCAA	GAATTCCGCCA	CGAGGGGGTC	60
TCCATTCCCC	GAGAACCCAG	GGGCAGGGTG	GGATGGGAA	GACCAGGAGC	AGAGTCGAGC	120
CTCACAGAACG	CCACCGCGGG	TCTCTGCTCA	GCACCCCAAGC	CGGGGCTCTG	GACCCAGGGT	180
AACAGCCCCA	GTTCATCCA	ACCCCTCTCA	GAGCCTCAAG	AGGGGTAGCT	CGGCTGCCGG	240
AAGAGAGGGG	TGCCCTATCC	CTGGCAACCC	CTCCACGTAG	CGTACCCAG	CACCTGCCAC	300
CGCCTTGCC	ATTTCTTGAA	GCTTGAAGTT	AACTCTCTTA	GAGTCTAAT	TTGGTTCAATT	360
TCTGCACAGG	TACATAGAT	GACTTATTG	GTTTAAATATAT	ATACATACAT		420
ATATATATAT	TTGCTGTAA	GAATTATGTT	TTAAACAGCT	GCTGTAGAGT	ACCTTTTTT	480
AAAGTAAATCT	TACAGTGGAG	TATATTTTTT	AAAGCACAAA	ATTGGTGCCA	AGACTGGGTG	540
AGAAATGTAC	ATTACCCCT	TATTATTTG	CGTCGGATTC	CTCGAG		586

(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCCGCC	AAAGAGCCGG	AATTTGGCCC	TCGAAGCCAA	GAATTCCGCCA	CGAGGGAAA	60
ATCTTGTCTT	AAAAATATAT	GAGTTGGGG	GTAAGGGTG	GGATAGCCAA	GCAAATCAG	120
TAATTATTAA	AAATGAACA	TATGAATTTT	TATTAATTTT	TAGTTAAATA	CAGATTTAC	180
AACGAGGTCA	GCATAAGCCT	AAATCTATAT	AGAGGGCTAA	CTCAGGCATT	GTCTTGTAA	240
TTTGTAGACT	GGATTTAAAAAA	CAACCTGTCC	TGTTTTGTCA	GTTCCCAGCT	TCTTCGTTTA	300
GAATAAAATTA	GACCAAAAGA	AGAAACGTGC	TTGTCTCTGT	ATACCCGCAG	AATGAAGTTA	360
CTGTTGTTAA	AACCGGATT	TTTCATTTA	CTAGGTTCCG	CTCTCTCCCT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

GAATTCCGCC	AAAGAGGCCG	GAATTTGGCC	TCGAAGCCAA	GAATTCCGCCA	CGAGGGTAAT	60
TTTAAAAATT	TATGTATTTT	CTAGCATTG	CCTCAAGGAT	TGAAATTTTT	TTTTTACTTT	120

GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTGATAT	180
TCTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTCTGCT TACAAAACAA	240
ATAGTAAATA CTCTAAATA GGGTTGGCA AACTTTCTT AAATAAAGG CCAGATGTA	300
ACTATTTAG GTTTGTGGG CCATGTGTT ATAACATATT TAGGTTTGT GGGCTACGTA	360
TGGTGTCTT CTCTTATTCT CTCTCTATCA CCTACCCCTCG AG	402

(2) INFORMATION FOR SEQ ID NO:881:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGGCC	60
GTTTTTTTTT TTTTTTTTTT TTTTTTCNNN NNAGGTTTC CCTAGGTGAT TTTAATTGC	120
TATTATAAAT AAATATCCAT TTTTCCCATA AAATATTGCT ATATGTTAGT ATATTAAATCT	180
TGCTACTGTTA CCTTTTCAA CTCTATTGTT TCTGATAGCT TGTCAGTTGT CTACCTTC	240
TCTCTAGGT AAATATTCT TACAATAAT GAGATTTGCT CCTACTTCC AATTATCTC	300
ATTCTTTA CTNNTCTTAC TGCACGGCT AGGACACCCAC TACCTCTCG AG	352

(2) INFORMATION FOR SEQ ID NO:882:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

TTTTTTTTTT TTTTTAACCTT AAAAATAGTT GTATTTATAT TCCACAATTG GTTCAAATAC	60
TGGTTTCTT ATAAACTTTC TACAGGATGT TTTAAACAA ATTCTTCACA TTGTTTTTG	120
ACTATGACT TGCGGAATTG CAGGGAAATA GTTCTGTGTA TTTTTAATAG CTTAATTGTT	180
ACTAAAGGGA TGTAGGTGG TCACATGCA CGCATGTTGG ATTCTAACAT GACATTAGT	240
GAGTTTCTG ATGTGGACCA TCCCTTGAT GCTGAAGGTA ATGCATCTGT TGAAAGAAGT	300
GACTGTAGAT TTGGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:883:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 548 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAA CTTTGGAAAG GGAAGCCAGA	60
GAAAAAGTA GAATGGACAA GTGACACTGT GGACAATGAA CACATGGCC GCCGTTCATC	120
CAAATGCTGC TGTATTTATG AGAAAACCTCG GGCCTTGGC GAGAGCTCCA CGGAAAGTGA	180

TGAGGAGGAA	GAAGAGGGCT	GTGGCATACA	CACTGTGTAC	GTGGCCACCG	CAAAGGACGG	240
GTTNTGCAAC	CCTAGGACCG	ACCCCCACCA	CCCTTCCCCA	GCTCCTGACC	NTTCCCAGCC	300
CCCTCCAGGG	CCAATGCAGC	ACTAAATCCC	TCTCTCCTCC	AGCATTCCCTG	TGTCTGTCTG	360
GCCCTAAATG	TATCCATGTG	GCTACTTCTC	CAGCCCCCTC	CTTCCCTNTC	TTCTGCCCTGA	420
TAGAGGGAAG	AGGAAGAGGA	GGACGAACAG	AGATCCTGAA	ATTCTGACTT	GCTGCTATTG	480
CAGAACCCAG	CCTCCTGGGT	TTCCCCAGTC	CTCATTTC	CTCCCAATAC	CCACCCCTCT	540
CTCTCGAG						548

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

GAATTCCGGCC	TTCATGGCCT	AAAAAAATACA	AAAATTAGC	CGGGCGTGTT	GGGGGGCGCC	60
TGTAGTCCCA	GCTACTTGGG	AGGCTGAGGC	AGGAGAAATGG	CATGAACCTG	GGAGGGCGAG	120
CTTGCAGTGA	GCCGAGATCG	CGCCACTGCA	CTCCAACCTG	GGAGACACAG	CGAGACTCCG	180
TCTCCNAAA	AAAAAAA	AAAAAAACAC	ACTTGTCCTA	CAAAGACTAA	CAAAGATAAC	240
AAAATAAAAT	AACCTTACAG	CATCATTAGA	AAAGCAACAA	AATCTAAGA	TAGATACATT	300
TATCTTCTT	TTTTAGAAC	TTTTCTGTA	TAATGGATG	GAATGCTTA	ATCTGTTTC	360
AATGTTTCA	GTGTTTGTGC	TTTGTCAAT	TGAGGTTGGA	TGTTAAAGCC	CTTACTACTG	420
TATTATACAA	AGCAGCGAAC	CTCGAG				446

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

GAATTCCGGCC	TTCATGGCCT	AGCCGGCGCC	GCCGNGTCTT	CCCCGTCTCC	TTTCCCGGCC	60
GCACAGGGTT	TTATAGGATC	ACATTGACAA	AAAGTACCATG	GAGTTTTATG	AGTCAGCATA	120
TTTTATTGTT	CTTATTCCCT	CAATAGTTAT	TACAGTAATT	TTCCCTTCT	TCTGGCTTT	180
CATGAAAGAA	ACATTATATG	ATGAAGTTCT	TGCAAAACAG	AAAAGAGAAC	AAAAGCTTAT	240
TCCTACCAAA	ACAGATAAAA	AGAAAGCAGA	AAAGAAAAAG	AATAAAAAGA	AGAAATCCA	300
GAATGGAAAC	CTCCATGAAT	CCGACTCTGA	GAGTGTACCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCCGCC TTCATGGCCT AAAAATCTAA ATTAACGTGAT GAATAATTAA AACAGAATT	60
TCAACATTGA GACAATGTAG AGATATATTA TGGTATAAAA TGAAGCATTT GCACGAACCT	120
TTTAGCTAAA ATTGTTTCAG AAGAAGTTGC TTTTGTTTT AGTGTACCTT GAGTCAACA	180
CAGATGTGAA TGCCTCGCTTT TTCCAGAAGG GTTCTTGGA GAAAACACTG GAGAAGTTCT	240
AAGCACTTTT TTTTTTTTTT TTTTTTTAGA GATGGTTCT TACTCTGTTG	300
TTCAGGCTGG AGTGCAGTGT TGCAATCATA GCTCACTGCA GCCTTGACCT CCTGGCCTCA	360
AGTGATACCC CTGTCTCAGC CTCTCGAG	388

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GCCCCAGTCT AAGGCATTTA AAATTAAACA GCTCTTCAAC GCCCCAAGTT ATTCATCAG	60
GCTAAGAACT TCTCCGAGAA ACGCACAAAGA AGGCAGGCAA ACAGGTGGGT AGGTGAGAGG	120
TCACGGGGCT CCATCTGCAA GCTCCATCTA CAAGGCATCA ATCTGCGTTG TGGCATCAAC	180
GTAAATGT TCTACAGCTT AGGGATCTTC TTGAAGCAAG GTTCCAAGCA CAAAACACTG	240
ATGACCGGAG GCTCAATTTA GAAGATGCAG CATCTGAAAA CCTTTACCCC AGGAAAGGAG	300
GGGTGCTTGC TGGCATTCTAT GGGCTCTGGA ACAAGCATTT ATTCAAGCT GATGGCCCT	360
CGAG	384

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GCACCCCCAA ATGCCAGCCT CTCCTTTCTT CCCATCCACC AGTATACTGC GGGGCCATT	60
CTGGTCTTTC TCCAACAGGA AACCCATTTC TGGTGGGATA TGCCCTTCAG TGCCACAGGG	120
CCACTCACCC CATGCATCTC TGTCCCTGCC GTCAGTGCTG GGACGGACAG CAAGGGCAAG	180
CCCACTGTCT GGCGGATAGG TGGGTGGAA CAGAGAGGG AGAATGCCGT CCTAAGCTTC	240
TGCTTGGGA TCCCCCACAC GACCTGGATA CTGGCTGGGA AACCTGTCTT AAGTAAAAGT	300
ATGGACCTCG CCTCGCCCCAC CGGCCTGCGA AGCCAGCATC TCCGTGAAGG TGGATGGAAG	360
CGCCTTTGTC CTCATTTGA GCTGCAAGCT GGGTCAGCGG CTCTGAAGCC CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GTAGGCCATG AAGGCCGAAT GGAAAAAGTC AGTTAAAGAG GACTCAGTCC CCACAGGTGC	60
GGAGGAGAAT GTGGTGTGTG AGTCACCACT AGAGATTATA AAGTCCAAGG AACTAGAAC	120
AGCCTTACAA ACAGTGGACC TCAACGAAGG AGATGCTGCA CCTGAACCCA CAGAAGCGAA	180
ACTCAAAAGA GAAGAAAGCA AACCAAGAAC CTCTCTGATG GCGTTCTCA GACAATGAC	240
ATCAGACTCC ACAGAAAAGA CTATCACACC GCCAGAGCCT GAACCAACAG GAGCACCACA	300
GAAGGGTAAA GAGGGCTCCT CGAAGGACAA GAAGTCAGCA GCTCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 719 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGGATGCT CTGGGTTGC TGTAGTCGTC	60
TGTTACTGGT CNTGTTAGGA GGAGGGCCAG GGGGACCCCC ACCTGGGCA GTCCCTCTG	120
TCCCCTCAGC AGGTGGCTGA GCTGGAGCAG ACATTTTCT GACAGAGAGA GTGAGGGTCT	180
GTTCTCTCC GGAGGCTGCG CGGAGACACC CGCGAGGGA CGCTGGGCT GAAGTGGACG	240
GAACTGCCAA GCTCCGCCCT CGCGCGACTA CCCCGCGGTC TAGCTGGCT GGGGTTTCAC	300
CATGTTGGCC AGGATGGTCT CGATCTCTG ACCTTGTGAT CTGGCCTGCCT CGGCCTCCCA	360
AAGTGCTGGA ATTACAGGTA TGAGGCCACTG TGCTGACAC CTGTCAAATT ATTTTACTGT	420
GTTTATTCTAC CATGTTCTTCT TCACTGTGGG GTCTCTGTC TTGCTGTTTT GTTTTTCTTT	480
TAACTCTTT TGTATTATTAG GAAGGTTTAT ATTAAATATT TAATTCTACA TTGGATAATT	540
CCTATATCAA AACTATTGTT GACAATCACT TACAGATGGA ACTTCGCTCA CTCTTCTCC	600
CCTTCTCACT CCTGCTCTTT CTCCCTTTCT CACTCCAGCA GTTGACTAGT CTCATTGAAA	660
AAACAAATTG GGGCCGGCCA GGCATGATGG CTCATGCCCTG TAATCCCAGA CAACTCGAG	719

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTCGGCC TTCATGGCCT AGATACTCCG CTGAAGACTCT GATGTCACCC CAAATGCATG	60
GCTCCAGCCT CAGTTCAGCT TTCCACACTG CTTGCAAGAA TTCCCTTCATT TATCTTGAGT	120
TTCTCTCTC ACTCCCATGG TAGCTTTCTC ATTCCCACCTG CCTCTTCTCA CATTTCAGTA	180
GATGAGAATA GAAGCCATAG GAAGCAAACCT TCCTCAACCT CCAGCCAACC GCCGAGCGAT	240
GGGCATCTCT CGGGACAACCT CGCACAAGGG CGCGAAACCC GGGGGCAAGA GAAAGCCCTA	300
CCACAAAGAG CGGAAGTATG AGTTGGGGCG CCCAGCTGCC AACACCAAGA TTGGCCCCCG	360
CCGCATCCAC ACAGTCCGTG TCGGGGGAGG TAACAAGAA TACCGTGCC TGAGGTTGGA	420
CGTGGGAAT TTCTCTGGG GTCAGACTC GAG	453

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCCGGCC	TTCATGGCCT	ACCAGCCTCT	GGGCTGAGGC	AAAGACCTCT	GAGGCCCGT	60
CCACCCAGGA	CCCTCTCAC	CAGGCCTCCA	CTGCGTCCTC	CCCAGCCCCA	GAGGAGAATG	120
CTCCGTCTGA	AGGCCAGCGT	GTGTGGGTC	AGGGACAGAG	CCCCAGGCCA	GAGAACTCTC	180
TGGAGCGGGA	GGAGATGGGT	CCCCGTGCCAG	CCGACACCGGA	TGCCCTCCAG	GACTGGGGC	240
CTGGCAGCAT	GGCCCACGTC	TCTGTGGTC	CTGTCTCCCTC	AGAAGGGACC	CCCAGCAGGG	300
AGCCAGTGGC	TTCAGGCAGC	TGGACCCCTA	AGGCTGAGGA	ACCCCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

AACAGGAGAT	GGACAAGCTG	AAGGAGCAAT	ATGATGCTGA	GTTGCAGGCC	CTGAGGGAGA	60
GTGTGAAAGA	AGCAACCAAG	AATGTCGAGG	TCTTGGCGAG	CAGGAGCAAC	ACTTCAGAGC	120
AAGACCCAGGC	GGGGACTGAA	ATGCGCGTGA	AGCTTCTGCA	GGAGGAGAAT	GAGAACGCTGC	180
AGGAAAGAAG	CAGAAGAGCTG	GAGCGGAGAG	TTGCTCAGCT	TCAAAGGCAG	ATCGAGGACC	240
TGAAAGCCGA	TGAAGCCAAG	GCGAAGGAAA	CGCTGAAGAA	GTACGAGGGG	GAAATACGAC	300
AGTTAGAGGA	GGCCCTTGTG	CACGCCAGAA	AGGAAGAAAA	AGAAGCTGTG	TCAGCCAGAA	360
GGGCCCTGGA	GAATGAACGT	GAGGCTGCTC	AGGGAAATCT	GAGTCAGACT	ACCCAGGAGC	420
AGAACAGATT	CTCTGAGAAG	CTCAAAGAGG	AGAGTGAGGC	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCCGGC	TTCATGGCCT	ACTCAGCTTT	CCTGGTCCTC	CATCTGAAC	GCTTCTTTGT	60
GCACCTCTTG	TTCTTTCTCT	TGGCTCCCG	TCTTGATTCC	TGTGATCACT	CTTGACATCAC	120
TAATTGCACA	AGTGATTTCA	GGTGCAATT	TGATTAGCT	GCGTCCACAC	AGTGATCGAT	180
GATCCTATGT	GCCTAGAAAG	GACACTGTGT	GCTGCTCATG	ACCTGCAACA	GGAAAAAAAGC	240
CATTTCTTGT	TAGCAGTGT	AGAACCTTAG	AGCAAAGGAG	TTGACCTTCT	GATTGAATAT	300
AAGCACAACC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCGTGATT GATCTTTGC CGCAAGCAGG	60
CTGGTGTGCG CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT	120
CCTATGTGCG TCCTCTGACT CTGGTGCCTA TATGTGATGA CTGTAACATAT GGATCTTACC	180
AGGGGCGCTG TGTCATCTGT GGAGGACCTG GGGTCTCTGA TGCCATTATAT TGTAAGGAGT	240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

GAATTCCGCC TTCATGGNCT ANTCTCATTT NAAATATATC CTTACTGAAA CATCTGGAAT	60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA	120
CCATGGCCTA CATTCTTATC TGTTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA	180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCCTGT GTAGCCTTCA	240
CTTTTTCCA AAAGAACGCT ATTAAATGCC AATCAAGTAT CTTCTCCCTC AAGCTCAGTA	300
GCTCGGGCCT TCAACAGCTG TTCCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT	360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCTCTAA AGATTCAAGCA CCCAACATG	420
ATAGAAAATCA CTGTGTTCAC ACTGTATCTC TATATCTGCC CATCCCGCTC GAG	473

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

GCTCGAGTGA AGTGGTATCT CATTGTGGTT TGGGTTTAA TTTTATAATA TTTTAATT	60
TAAAATCAAAGAATATAG CGGGCTGGGG TGGGTGCTCA AGCCTGAT CCCACCCACCC	120
TGGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGT CAAGACCAGC CTGGCCAACA	180
CGGTGAAACC CCATCTCCAC TAAACATACA AAACCTCAGCC GGCTATGGTG GCAGGCACCC	240
GTAATCCAG CCTCTCAGGA CGCTGAAACA GGAGAACATAC CTGATCCGGG AGGTGGAGGC	300
TGCCATGAGT CAGAACATCAGC TCACTGCCT CCAGCTGAG AGGAGACCCG TACAAAAAAA	360
AAAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATTT TAGATTTGAA	420
AATGATGTTT TTACTCATT TCAAAATGTA CTGTAACCTT TCTTGGTTC TTACTGTTT	480
CATTTAACTT TCTCTGTTT CAAGAAAAAT TGTCTTATT GACATTGTA AAAAGAATG	540
TGTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG	594

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

GAATTCCGCC TTCATGGCCT ACTGTACATT TTTTTAAAG TTGTTGAAA AGAATATTGT	60
CTTATTCTAT AAAACATTC AACCTAGTT AGAGATTTGT AATCAAAAAA CATTGCGCA	120
GAAAGCAGCA CTAGGGCTG CCTGTTCTAT ACCCTACAGT CAGACAGGAA AAGAACTGAA	180
AATGCCACCC TTCTGACATT CTGAGGCAGC TGGACTGGCA GCCAAGTAAA GGAGAGTGT	240
GAGGTGGTGT GGGGAGGGTG GGGAGGCAGC GCGAGGGTGC TCTCCACAGG GTAGGTCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

GCGGCCTTCA TGGCCTAGTG CTTGTCAGTT TGGAAAGTCA CAGGGAGTTT ACCATTCTAT	60
AATTAGAGTA GGAGGAAAAT GAGAACCCAC TGGTAGAAGA AGAAGCAACA GTCTTCTAGG	120
GTCTGGCATT TGATGAGATA GTTATTCACT TACTGTGCAAT TTCCATTGTT TTTCATGGC	180
AGAACATACG GCAGAGATTG GGGAACTCGC ATGCCGAAG CCAGGTTATT CTTATGTTCT	240
GTAACATATGT TGCTCCAGG GCTGTTGTGTC TAGACTAGT GAGTTGTGCC CCAGACAAAT	300
GGGGTGCTGG TCTGCTCCA CAAATCTTTA TCCCAGTCTT CATCGCAAGG AGGGCACTGC	360
CAAGTGCTCT CAGCCAGAGT CTCTTGCTCA AGGCTCTGGG TTGGTTGAC AACATCTTGC	420
TCAATACAAAC TTCTGTCATC ACAGCTTGAG ATATGATGAC TAATTTCAGC TCGAG	475

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 507 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCCGCC TTCATGGCCT ACAGCTGCCT TTTCTTTAA AGGGTTCTT GTCTTCTGGA	60
ATTCCTTTA CTAGAGGATC CTCTCCAGAA CGTTCTCAA TATAGTTCTT TATTTCTTCA	120
GAACATTTAG ACACCTGTTG TCTCTGCAAC TTCACCTCTT TGCGAAGCTG CTCAACTTCC	180
ATTTTCAGTT TTTCCTCTC TGCCAAATCT TCGATGAA GGGCAGGCAT TTTCGCCCA	240
GAACCGGGCT CAGGCTAGCT CTGGCAGCGG AGCCGCTGA AGAGCGCGA AGCTCGGCGC	300
GTCCCGAAAC AACTGAAGGC CTGGCCCGCC GCCCACCCGC GCAGGATGTG ACTGCAGCCC	360
TGCTGCGGTC CCCAGCTCC CGAGGGCTTG GCTTTCTCG GGACGCTTGT CACGCCAGCG	420
TGCCCCAGCT TCTTAGGACC TGAGAACTCT GCCTTTCTC AAGTCCCTGC AACCCAGGAG	480
GCCTGCCCGG GTGCTAGTAG GCCATGA	507

(2) INFORMATION FOR SEQ ID NO:901:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 495 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

GAATTCCGCC	TTCATGGCCT	AGTTTGGATT	TTCATATTAG	GGATACTCAA	CTGGTATTAT	60
TATTCTGGCC	CCCGCAAATT	TTTCAGTAGG	TCCCCTAGTA	TGTCACTGCCA	GGGACTATGN	120
GAGTTCCCTGG	GAATAGCACT	GTAANACATT	CTTGAGTGGG	TCCTTGACTC	CATTGAGTTT	180
ATAATCTCGT	AGGAGGAAGG	CTATGAAGAA	TTCTAATAAA	GCAAAGCAAG	CAATCACAAAC	240
AAACCTTCCT	CTTTAACTTA	TCAAAATGG	AAACTTTGAA	GAGCTGCTCT	TTAATAAATC	300
ATTGGAAAGC	ACCAAGGACCC	AGGTGTTTG	ACTCAGCCTC	ATTCAGACT	GAGATCTGAG	360
GCCATGATAA	CTCATGTGCC	TATATATGCT	GATAATCACC	ATTACCTATA	CCATTCTTTA	420
CATTCTCTCA	TCTACACAAAT	CATCTCAAC	TCTCTCTCAT	CCACTTCAGC	GATTGAATTG	480
TTTACCGGCC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:902:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 266 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

GAATTCCGCC	AAAGAGGCCT	AGAATTCCAG	ACCTAGCTCA	ACCCATGCC	CCTTCCTTC	60
CTTCCCTCCT	TCCCTTCTTT	CTTTTCCCTT	TTCTCCTTCC	CTCCCTTCTC	CCTTCTTCC	120
TTCTCTCCCT	CTTCTCTTT	CTCCCTCTT	CCTGCTCTTC	CTTCCTTCCT	CCCTCCCTCC	180
CCTCCCTCT	TTCCCTTCCT	CCCTCCCTTC	CATTCTTC	TCCCCCACCC	CCCGTTCTT	240
CTCTTGGAG	AGATGTACAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:903:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

GAATTCCGCC	AAAGAGGCCT	AAATGAGAGC	TGAGTGAAGT	GGATGCCCT	TATAAAAACA	60
TCAGATCTCG	TGAGAACTTA	CTATCACTAG	AATAGCATGG	GGAACCCACC	CCATGATTCA	120
GTTACCTGCC	CCCAAGGTCTC	TGCCACCAACA	CATGGGATT	ATGGGAACCA	CAACTCAAGA	180
TGAGATTTGG	GTGGGGACAC	AGGCAAATT	TATCAGCTGT	TGTGCTCATT	AGTTTGATA	240
TCATCCCTGG	CTCCCTTACG	ACTATAAGGG	CAGGATTGAG	TCCTTGCAAC	AGAAACCATT	300
CAGCCTGCAA	AGCTGAACCT	ATTTACTTTC	TGACCCCTTA	TGGAAAAGTT	TACTGATCTC	360
TGGACTAGAC	AGTTTTTAA	AAATGACATC	TTATGACCGG	GATTCTCGAG		410

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

GAATTGGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAA	AAAAAGAAAA AAAGCTGCTT	60
TGGGTCTTAT GAGGGAGGG ACTGGGAATC TAGGTGTTTC	AAGGCCTCCA GGCGAATTCTT	120
AAGGTCAACAC AAGCTTGGGA GACACTTCAT TAAGCAAAT	CTTTGGCCG TTTTGGTCTG	180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG	TTTGGGGTGG ACTGATCATC	240
AGCATTAACTA CGTTGGAAA TTGAATTAG TTTTACTACT	CAGAGCTTAT TAGACTTGAG	300
CAGATTAACTA CGGAAGGACA CTCGAG		326

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

GAATTGGGCC AAAGAGGCCTT AGGAACCTGTT TTGACCCCTGA	AGGCATTTTA ATCCACTGTC	60
CCCTACAAGG CCTCACAAAGT GCTGGGGAA AAAAACAGC	AATGAGGATG ATCCTGAGTT	120
AATGTGTATG CTCCCAAGA GAGCTTGCT ATACCTTGAT	TATTTCATAA AATCACATGT	180
TAATACATTG CTTTCAGAAT GAAATACTGA CTTGATCTGA	TAGGAGAAA TGGTAATAATT	240
TCATAGTTGT TTCCAAAGA CAAATTAAA TGTTGTCTGT	TATCTCCCTA CTTAGTTAA	300
GAATTAGTT TTGAAACCCA TTGACTTTGT CATTGCAAT	TTTAAAATA TTTGGGACTG	360
GGCATGGTCG CTCACGCCCTG TAATCCCAGC	ACTTTGGGAG GCATCTCGAG	410

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

GAATTGGGCC AAAGAGGCCT ACAGCTTCCCG GGTTCAAGCG	ATTCTCCTGC CTCAGCCTTT	60
TGAGTGGCTG GGACTACAGG TGGATGCCCT CATGCCCTGGC	TAATTTTTTG TATTTTAGTG	120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC	TCGTGAGCTC GGGCAATCCA	180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA	GCCACTGCAAC CCGGTGAGG	240
TACAGTTTTG AAGTTCATGC AAATCTCATC ATTTGCTTT	CTGCAACAAA ACATTTCTT	300
TCAACTTATT TTGCTCTGTGT GAAGCTCACT GCTTTAACTC	ATATATGGAG TTATCTTCTT	360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG	AAGATGTCTA AGGTGGCTTG	420
ATTGACAAAG GTCTCTCCTC ATCCCCAAAA TAAATAACAT	TTTTTCATTT ATAATAGTAA	480
TACACCAGTC GACTCGAG		498

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

GAATTCTGGCC	AAAGAGGCCT	AAACTGGTGC	TGGTTTCACA	TCACGACAGC	AACGGGATTC	60
TTTGCTTTG	AAAATGTGTC	AGTCACCTCG	TCCAACCTGA	TCTTCCGGAC	ATTTGACTTG	120
TTTCTGGTTA	TCCACCATCT	CTTGCCTTT	CTTGGGTTTC	TTGGCTGCTT	GGTCAATCTC	180
CAAGCTGGCC	ACTATCTAGC	TATGACCACG	TTCGCTCTGG	AGATGAGCAC	GCCCTTTACC	240
TGCCCTTCCC	GGATGCTCTT	AAAGCGGGC	TGGTCCGAGT	CCTGTTTTG	GAAGCTAAC	300
CAGTGGCTGA	TGATTACAT	GTTCACTGC	CGCATGGTC	TAACCTACCA	CATGTGGTGG	360
GTGTGTTTCT	GGCACTGGGA	CGGCCTGGTC	AGCAGCCTGT	ATCTGCCTCA	TTTGACACTG	420
TTCCCTGTG	GACTGGCTCT	GCTTACGCTA	ATCATTAATC	CATATTGGAC	CCAGACTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

GAATTCTGGCC	AAAGAGGCCT	AGAACAAATG	GTTTTCAGAC	ACTGAAAGTT	CATACTACAG	60
GAATGTGATC	TCTCGAGAA	GGGGAAATAA	TGAGGTGAGT	CCAGTGATTG	CTCAGGGCAA	120
TGGCCTGGAG	GCAGTTCTA	GGCAGCAAAG	CAGGGAGGG	GAAGCCAGAC	ACCAGTGGTC	180
CTGCTGTGTT	GAGGAGATGG	AGATCAGTGT	CACCGGAGGC	CAAGGTGAGT	AAAGTGAGAGG	240
AGAGGAGGCA	GCAGCACACA	GACAGAGAGT	GCTGTAGATC	TGCAGTGGGT	CCCCCTGGAGT	300
CCTTGGTTGA	GTGAAGGTGT	TAGAAGAAAC	TACTTAAGCC	AAGAAATGAG	TAATCGAAA	360
TTAATAGAGC	AAATAATTTA	CAGATCATCT	ATGGGGCTGG	GAAAAGTTTG	TGTTTCCACT	420
AGCCAGAGTA	GAATAAACTC	ATAATGCATG	GGTCATCAGG	TGGAGTCCCTC	CAACAGGTGT	480
TGCCTTAGTA	CTGAGGTCAA	ATTGTCCCTA	GACCAAAGGC	TTCTTTGGAC	TTCCCTAAC	540
AAAGCTTAAA	GACAAGCCTT	GGAAGGATCA	AACTAATTTC	AAGAAACTTA	ACTGTGAATC	600
AGATAAAAC	CCAATACCAT	TTATAGGAAT	ATAACAAAAT	CCATCAACAN	ACNACATAAAC	660
ACTCTAATT	ACCAACATTC	AGTAAAAAAAT	TACTGGAAAC	AGAGAAATAT	AAATTATGGC	720
CCATAATTAG	GAAAAAGGG	TAATCATTAG	AGGTAGAACT	CGAG		764

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTGGCC AAAGAGGCCT ACTAAGGACT TGTTTCGAA GGAGCTGACT GGCCAATCAC	60
AATTGCGAAG ATGAAGGCTC TGTGGGCCGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT	120
AGCCGAGGGA GAGCCGGAGG TGACAGATCA GCTCGAG	157

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

GAATTGGCGG CGCGCTCGAC AGAATAGACC TGGTTTGTGA ATTATGGCCT GGATTCACT	60
TATACTCTCT CTCCCTGGCTC TCAGCTCAGG GGCCATTTC CAGGCTGTT TGACTCAGGA	120
ATCTGCACTC ACCACATCAC CTGGTGAAC AGTCACACTC ACTTGCTGCT CAAGTACTGG	180
GGCTGTTACA ACTGTAACT ATGCCAACTG GGTCCAAGAA AAACCAAGATC ATTTATTAC	240
TGGCTTAATA GGTGTTACCA GACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC	300
CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGCA CAGACTGAGG ATGAGGCAAT	360
ATATTCTGTG GCTCTATGGT ACAGCAACCA TTGGGTGTT GGTGGAGGAA CCAAACGTGAC	420
TGTCCCTAGGC CAGCCCAAGT CTTCGCCATC AGTCACCCCTG TTTCCACCTT CCTCTGAAGA	480
GCTCGAG	487

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

GAATTGGCGG CGCGCTCGAC AGTTACTGAG CACACAGGAC CTCACAAATGG GATGGAGCTA	60
TATCATCTC TTTTTGGTAG CAACAGCTAC AGGTGTCAC TCCAGGTCC AACTGAGCA	120
GCCTGGGCT GAGCTGGTAA AGCCTGGGC TTCAGTGAAG TTGTCCTGCA AGGCTTCTGG	180
CTACACTTTC ACCAGCTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCCTGGA	240
GTGGATTGGA ATGATTCACTC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG	300
CAAGGCCACA CTGACTGTAG ACAAACTCTC CAGCACAGCC TACATGAAAC TCAGCAGCCT	360
GACATCTGAG GACTCTGGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC	420
TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGGCCAAA CGCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGCGG CCGCGTCGAC CCAGGATGCC GCGCAGCAGA GCTCTGATT	TGGGGTCCT	60
CGCCCTGACC ACCATGCTCA GCCTCTGTGG AGGTGAAGAC GACATTGAGG CCGACCAGT		120
AGGCACCTAT GGATAAGTG TATATCAGTC TCCTGGAGAC ATTGGCCAGT ACACATTG	A	180
ATTGATGGT GATGAGTTGT TCTATGTGGA CTTGGATAAG AAGGAGACTG TCTGGATGCT		240
TCCTGAGTTT GGCCAATTGG CAAGCTTTGA CCCCCAAGGT GGACTGCAA ACATAGCTGT		300
AGTAAAACAC AACTGGGAG TCTTGACTAA GAGGTCAAAT TCCACCCAG CTACCAATGA		360
GGCTCTCAA CGCGACTGTGT TCCCTGAGTC CCCTGTGCTG CTGGGTCAAGC CCAACACCC		420
CATCATGTC GAG		433

(2) INFORMATION FOR SEQ ID NO:913:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

GAATTCGCGG CCGCGTCGAC GCAAGATGGA TTCACAGGCC CAGGTTCTTA TATTGCTGCT		60
GCTATGGTA TCTGGTACCT GTGGGGACAT TGTGATGTCA CAGTCTCCAT CCTCCCTGGC		120
TGTGTCAGCA GGAGAGAAG		139

(2) INFORMATION FOR SEQ ID NO:914:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 166 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGCGG CCGCGTCGAC ATCATGGCTA CCCTGCGTGT CCCACTCCTG GTGGCTCTCG		60
TCCTCTTGC TGTGGCAATT CAGACCTCTG ATGCAGGTCC CTATGGGCC AATGTGGAAG		120
ACAGTATCTG CTGCCAGGAC TACATCGTC ACCCTCTGCC ATCAGG		166

(2) INFORMATION FOR SEQ ID NO:915:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 590 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

GAATTCGCGG CCGCGTCGAC TTCTTGGCA GCACAGAAGA CAGAGCCAT TTTGACCAAG		60
CTATGTTCCC TGTGATGGAG ACCTTCGAAA TCAATGATCC AGTGCCCAAG AAGAGAAATG		120
GGGGGACCTT CTGCATGGCA GTCATGGCCA TCCACCTGT CCTGCTCACG GCAGGTACTG		180
CACTGCTGCT GATTCAAGTT CTCAATCTGC AGGAGCAGCT CCAGATGCTA GAGATGTGCT		240
GTGGCAATGG ATCACTAGCT ATCGAGGACA AGGCCCTCTT CTCGCTCAG TGGGCACCCA		300
AAACACACCT GGTACCTAGA GCACAGGGC TGCAAGCCTT GCAGGCCAG CTCAGCTGGG		360

TCCATACCAAG CCAGGAGCAA CTCCGTCAGC AGTTCAACAA CCTCACTCAA AATCCAGAGT	420
TGTTCCAGAT TAAAGGTGAA CGAGGCTCTC CAGGTCCAAA AGGGGCCCG GGTGCTCCTG	480
GAATCCCCGG GCTGCCTGGG CCAGCTGCTG AGAAGGGAGA AAAGGGGGCT GCAGTCGTG	540
ATGGAACCCC AGGTGTCCAA GGACCCAGG GCCCACCAGG AAAACTCGAG	590

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

GAATTCGCGG CCCCGTCGAC GGAAGAGCAA TGAAAACATA TGCTCCTACA TTATTCAATGT	60
TTCTATGGCT GCAGCTGGAT GGGATGAGCC AAGGTGAGCA GGTGGAGCAG CTTCCCTCCA	120
TCCTGAGAGT CCAGGAGGGG TCCNGTGCCA GCATCAACTG CACTTATGAG AACAGTGCCT	180
CCAACACTTT CCCTGGTAT AAGCAAGAAC CTGGAGAGAA TCCTAAAGCTC ATCATTGACA	240
TTCGTTCAAA TATGGAAAAG AAGCAGACCC AAGGACTCAT CGTTTTCTG GATAAGAAAG	300
CCAAACGTTC TCCCTGCACA TCACAGACAC CCAGCCTGGA GACTCAGCCA TGACTTCCTG	360
TGCTGCAAGT GAGAGCACCA ATACAGGCAA ATTAACCTTT GGGGATGGGA CCGTGCTCAC	420
AGTGAAGCCA AACATCCAGA ACCCAGAACCC TGCTGTGTAC CAGTTAAAAG ATCCTCGGTC	480
TCAGGACAGC ACCCTCTGCC TGTTCAACCGA CTTTGACTCC CAAATCAATG TGCGAAAAC	540
CATGGAATCT GGAACGTTCA TCACTGACAA AACTGTGCTG GACAATCTCG AG	592

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

GAATTCGCGG CCCCGTCGAC GAATGAGGTG CTCTCTTCAG TTCTGGGGG TGCTTATGTT	60
CTGGATCTCT GGAGTCAGTG GGGATATTGT GATAACCCAG GATGAACCTCT CCAATCCTGT	120
CACTTCTGGA GAATCAGTTT CCATCTCCTG CAGGTCTAGT AAGAGC	166

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCGG CCCCGTCGAC GTCTGAGAGG AACCCCTCTC TGAGGATGGA CACTTCTCAC	60
ACTACAAAGT CCTGTTGCT GATTCTTCTT GTGGCCCTAC TGTGTGAGA AAGAGCTCAG	120
GGACTGGAGT GTTACCAAGTG CTATGGAGTC CCATTTGAGA CTTCTGCC ATCAATTACC	180

TGCCCCCTACC CTATAGTGAG

200

(2) INFORMATION FOR SEQ ID NO:919:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCTCGGG CGCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGTCTGCCG TCATTTCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCT	120
CTCGCAAGGA CGGTCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGAA AGCTTGAAT CATCCCTGCG AGCCTATCCT GCCCACGTGT T	231

(2) INFORMATION FOR SEQ ID NO:920:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 115 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCTCGGG CGCGCGTCGAC GTTTTGTAT TGTTACGAAG TAAATGATTC GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:921:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 213 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAA ATTAAATTGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCCAGCTGT CATACAATTG ACCACTGGCC AGGTGCTGAG AGAACGATTA GGGAACAGTG	120
TGGGTGTGT CAGAGTTGGA CGGCTCCATC CCTTGGCTT CATTATCTTC CTCCCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCCGCCG CGA	213

(2) INFORMATION FOR SEQ ID NO:922:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 504 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCTGGCC	AAAGAGGCCTA	CTTAGAAGCC	AAAGAAGGAG	ATTTGCACAG	GATAAGAAC	60
CCATTCATAAT	TCCACATGCT	GCATTCAGGG	CTGGTCCACG	GCCTGGCTTT	CTGGTTTGAC	120
GTTGCTTTCA	TGGCTCCAT	AATGACCGTG	TGGCTGTCCA	CAGCCCCGAC	AGAGCCCCCTG	180
ACCCACTGGT	ACCAGGTGCG	GTGCTGTTC	CAGTCACCAAC	TGTTGCCAA	GGCAGGGGAC	240
ACGCTCTCAG	GGACATGTCT	GCTTATTGCC	AAACAAAGAC	AGAGCTACGA	CATCAGTATT	300
GTGGCCCAAG	TGGACCAAGAC	CGGCTCCAAG	TCCAGTAACC	TCCTGGATCT	AAAAAACCCC	360
TTCTTTAGAT	ACACGGGCAC	AAAGCCCTCA	CCCCCACCGG	GCTCCCACTA	CACATCTCCC	420
TCGGAAAACA	TGTGGAACAC	GGGCAGGCACC	TACAACCTCA	GCAGCGGGAT	GGCCGTGGCA	480
GGGATGCCGA	CCACCAAGACT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCTGGCC	AAAGAGGCCT	ACATTCATCA	AGTCATCCAA	CTTCTATAGT	CAAAGCAGGA	60
TCATGTGGCG	AAGCATATGC	TCCACAAGGG	TGGATAGCTT	TTTCATGGA	ATTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

GAATTCTGGCC	AAAGAGGCCT	AAAGAGAGTG	GAGGAGGAGG	ACAAGATTGA	TACTATGAGA	60
GTTGGAGGAC	ATAATTATG	GATCATAGCT	CCAGAACTGA	AAAGGGAGGA	AATGTAGACA	120
GAGGAAGGCA	TTAGCCATTG	AGAAGAATAG	GGACATATTT	TCTTTACTCT	CTTGTAGAG	180
GAAGATAGCT	GGGGGAGTAT	AGACAAGTTG	TAAGAATGAA	CGAAGGAAGG	CAAGAGCAGA	240
CTTGTGGAT	GAATTATATT	TTCTCTATGA	AGTTTGAGAA	TTAAACCTTA	TGCTGAGAAG	300
GAGGGCAGGA	GAGACTGTAT	ATGGAATGTA	AGGTTTGGGA	TAACCAATGT	AAGTTTGGG	360
AATGAGAAAG	CCACCTAGGG	ATGAGGAAA	AATATTAAA	ATTTGTATC	CACTGAAAAT	420
TCTTCAACAG	TGAAAATGA	AGCATGCTCA	ACTGAAATG	GTCATATATC	TAAGAGAAA	480
TGGATTATT	TTGTTATTTT	TCTCTATATT	TGTTAGTATT	TACAGTAAGC	ATGTATTACC	540
TTTATAGTGA	AAAAGGTGTCA	TTTTTTACA	TTGGTCAATT	TTTTGTTATT	AAATTCATG	600
CTTGTGTTTA	ATTGTTCTT	GTGTGTATGA	TTGCAATATC	AGGTATTGATG	TGTGGTGTATG	660
TGTGTGATTC	AGAAGTCAGA	AGACTTAAGT	TCCGACACCC	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

GAATTCGGCC	AAAGAGGCCT	AGGATTCAAA	TTATTCTGAC	AGACCTGTGT	GGCAGTTCA	60
GCTGATAGCT	GGAGTTCTT	GTCTTTCT	ACATGGCCTT	TCATCTTCCA	AGAGTTAGAC	120
TATGATTCTT	CACATCATGA	TGGCTTAGGG	TCCCAAAAG	AAAAGAGTAG	AACTTGCAAT	180
ACCTCTTAAG	CCCTATGCC	AAGAACTCAT	ACAGTGATAC	TTCTGCCACC	TTGTGTTAGT	240
CAAAGCAAGT	CACAAGGCCA	GCCGAGATTCA	AAAGAAATGGA	AAAATAGACT	CAATTTCCTG	300
GTGAGAAGTA	GCAAGGTAC	ATTGCAAAGG	AGTCTGGAC	TGGGAAGGAG	TTACTCATT	360
GTGGCCTTA	TAATAATCTT	CCACAAATGC	CTGTAATT	GGCACTGTG	TTAGTACTGG	420
TGATAGAAGA	TAAGTAGCTT	ATTTCACTGAT	CTTAATT	TTTTATAT	TTGATAATT	480
TATGATGCG	GTTCACTGTG	CACTGGTATC	AATCCCAGGG	GAGGACTGT	AACACCTTG	540
CAATACTGTG	TACCACTGG	CATGAGCTG	GTGAGACAGA	ACACACAAATA	600	
AGTTTAGGGA	AGCAACTTTA	TTACTCACAG	ACAGGCAGCA	AGGGACTCGA	G	651

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 700 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

GAATTCGGCC	AAAGAGGCCT	AAAAAGATGA	AAGGACCAAT	CAAAGATT	TTAAAGCTA	60
AAGGAAAGA	TTTAGAGACA	GAGAATGGAAG	AAAGAAATTC	TAAGTTGTG	GTGGACAAAC	120
CAGAACAGAC	AGTGAAGACC	TTTCCACTGC	CAGCTGTTG	TTTGGAAAGA	GCAGCTACTA	180
CAAAGGCAGA	TAAGAACATC	AAGAATCCAA	TCCAACCATC	CTTCAAAATG	TTAAAAAAATA	240
CTAAACCAAT	GACTACTTTC	CAAGAAGAAA	CCAAGGCTCA	GTTCACGCA	TCAGAGAAAA	300
CCCTCCTAA	AGAGAACTTG	CCAAAGATT	GCCTAAATCA	GGAGAAAGTC	GATGTAATCC	360
TTCAGAAGCT	GGAGCGTCTT	TACTGTTGG	CTCAATGAA	CCTTCCTTGT	CAAATCAAGA	420
TAGAAAATAT	TCCCTCAATTC	TACCTAATG	TGTACAAACT	ACCTCTGTG	ATCTCAAATT	480
GGACAAATT	GATCCCCAA	GACAGGAAAT	TCTAGTAAA	TTACTAGATG	TGCTACTGG	540
TGATTGTAT	ATTCTCCAA	AGAATGTCAG	TGATGGGTT	AAAAGGGTAA	GAACATTATT	600
AAGCAATGAG	AGAGATTCCA	AAGGCAGGG	TCACCTCTCA	GGAGTCCCTA	CTGATGTTAC	660
AGTTACTGAG	ACTCCAGAA	AGAACACAGA	ATCCCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

GAATTCGGCC	AAAGAGGCCT	AGGGGTGGTG	GAGGCGTGG	CCCAACGGT	ACCGTCGG	60
TGGAGCAAGG	GCAAGGAGAG	GCTCTGGCC	AGACACAGCT	TGGAAAAGCT	CATCTCCCTC	120
TGGGGTTAA	AAACTCAAAG	CAAACGGAGC	AAGCCTGGCG	GCCCTGGGA	TGGGCAGGG	180

CCTCTACCTC ACTGTGATCT TCGACCTGGC GACACAGGAC AGCCACACAG AAGCACGCCA	240
ACACACTTAA AGCTTTGCTC CAACTAAATC ATTTAGTTTC CCTTGAGAAA ATAACGTAAA	300
AAAAAAACAA CTGCTGACAT CTATGCTGT AGCTCGATT TACAGTCTGC TCTTGTGAG	360
AAAGGAAAAT CACTCGAG	378

(2) INFORMATION FOR SEQ ID NO:928:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

GAATTCGGCC AAAGAGGCCT AATATTCAC ATTTCTCTT TCTAAAAGTG TAAATTTTC	60
ACTTTAAAT GAAGCAAGAA TTAAATAAT AGAACAAATA CCATATATCA TCACAGAGTC	120
AATATATTAT GGTCTGTTC TGACCAAATG TTGATTGTA TTTGTGTTAC CAGAACTGCA	180
GGGTTTCTA TGGTACATG GTCAGTGCAT GCTCAGACAG CTGTTAAAT CAAAACCTTC	240
ACTGTGCTGG GTCACTGGT AACTACTGTC TATCTCACAA GTGCATTCTG CTGACATTCA	300
AGGGTTAAC TGTTTCTAG TAAATACTGT GCTTAAAGT AGTACATACT GTGAGCTGTG	360
TTATTAGAAA CTCGTTGTC CTTGTGTC AAAATAAGGA GGAACACTCT CGCACCAAT	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:929:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC AAAGAGGCCT AGGTAAATGT TAGTGGAAA TTTTATGAGT ATATGCTGAA	60
AGGAGAGATT AGTCACATG AACTCAATA TGTCAAGAT AATGAATGC TTAGAAAGGT	120
TACTTTGAT CCAGAAAGTAT TTTCAACAT ATTACTTCCT CCTATCATAT TTTATGCAGG	180
TTATAGCCTG AAAAGGAGAC ATTTTTTCG AAATCTGGG TCTATCCTAG CATAAGCTTT	240
TCTTGGAAACA GCAATTCTT GTTTCGTTAT TGGTCAATA ATGTATGGCT GTGTAACGCT	300
GATGAAGGTA ACGGGACAAC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GAATTCGGCC AAAGAGGCCT ATGGACACCC TGTGCCCAA GCCGATGGCC CCACCCAGCA	60
GCATCAGCAC AGNTGCCCC CTTCTCCGCA GAGCAGGCTC TCCTTTACGG GACTCTCCTC	120

TTCCCTCCCA CCTGATGCGC ATCAGCAGCC ACGGGCCTGG CCCTTGAATC TTGTCTAACT	180
GCACTCGCTG CCTGGTGGCC TCATCCCACC CCAAGACCAC TGCACGTGATG GCTCCAACCC	240
CAACTTCTCC CTGCACTCAG CTTATGAATA CGACGGCCCT CATTGCATCC ATGCAGAGAC	300
CTCAGAGGCA GCTCAGCTCA GTGCTCAGCG TGGCACTCGG GGCTTCACAC TTCCCCCGT	360
GTCCGTCTG AGAAAAACTGT GACACCATCA ACCCAACTAA CTCGAG	406

(2) INFORMATION FOR SEQ ID NO:931:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTGGGCC TCATGGCTA CCAGACTGTA AACATTCCAG GTCCCTGAAAA AGTGTGGAC	60
CAGCTCTCTA CTGTTATGTT CTCCAGTTTT AAAATGTA AATCAGTTGA AACACTCGAT	120
CAGAAGGCAG ATGAAGTCCT TGACTGTCAAG AGTAACCAAA ACAGACCCAGA TGAATGCAA	180
AGTGAAGGTC AGTCAGCCAA GGAGATGCTA AGTAGTGACC AGAGAGAGAC TGTCAACCGA	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:932:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTGGGCC TTCATGGCCT ACTCCATTGT CACGCCAATT TCCCCTAGTC CAAGTTTTTT	60
CTTTGCTGAT TCCTTTGTCG ATGTGTGCTT TGAGCCCTTC TCATCTTGTC TTTCTCTCTT	120
TCCTAGGAGC AGCTCCTGAA GCAGCAGCAG CAGCACCACT GGCAGCAGCA TCAACAGGGC	180
TCTGCCCCCTC CTACCCCACT GCCCCCATCA CCACCAAGC CTGTGACCCCT GGGGGCTGTG	240
CCAGCTCCAC AGGCTCCACC CCCGCCCCAC AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:933:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 421 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTGGGCC TTCATGGCCT ACGAGTGCAG CCAGCCAGAT GAGCGCCCGG TCCTGGTGAA	60
GAGCATTCACTACCTCTACT TCTCCATGAT CCTGTCCAGC GTCACCCCTCA TCACTGTCTC	120
CACCGTGAGC TGGTTCACAG AGCCACCCCTC CAAGGAGATG GTCAGCCACC TGACCTGGTT	180
TACTCGTCAC GACCCCGTGG TCCAGAAGGA ACAAGCACCA CCAGCAGCTC CCTTGCTCT	240
TACCCCTCTCT CAGAACGGGA TGCCAGAGGC CAGCAGCAGC AGCAGCGTCC AGTCGAGAT	300

GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCAAAGC AGTCAAAGT	360
GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGCTCCCGGC	420
C	421

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGAAACA TGGACCTAAA GCAGTGACTA	60
TTGCAAATTTC TCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA	120
AGACACCTGC TGACCCAAAAA CTGAAACATC TAAGTCAAAC CAAAAAAAC AAAGGATCTG	180
ATAGCTCACT CTCTGCTAAC AGTGTATGCCG GAGAAAGATT TTGTGAAGAG GAGAAGGAAT	240
ATTTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGCT GAAGATAGTG	300
ATAGCGGTGA CGACTCTTC ATTGGGAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT	360
GTCATTCTTC AGTTAAGGAA CAAAAACCAC TAGAAAAAGT GTTTCTTAA GAACATACAG	420
GTGAAACTCA TGGGATACA ACTCTCGAG	449

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAATAGTG ATTTTTGAC TATCTATAGA TATTAGTTGG	60
CATTCTACTG TAAGGAAAC TTTCTTTCT CCTGTACTTA TTCATCGTCC CCCAGGAATC	120
AGTCATTTT CCAAGGAGAC CTAGTTCTT TTTGTGAGGA GTTGTGTTGA GTTCATTTG	180
AAGTCATTT GAAGGTTGA GTTCATTTA CTATAATCTG CCTAGGTGTG ATTTCTTTT	240
TATTTATTCT CTCTAGGATT TGCAGAGATT TTTTGAAACC TGTGGCTTGA TGTCCATCAC	300
TTTTGAAAT TTCTCAGCCA SCATAGTATC TGCAGACTGT GTGTCTGTC CATTCTCTCT	360
CTTCTCTCT GTAGGACTT CATTACAAG GATGTTAGAA CTTTTTACCA TGGCTCTCGA	420
G	421

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCCTTACCT TTCTAATTAT	60
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ATAGAAATGT CATAATTCTT CTTTATTCT TGAATGATAG TTTTGTGGGA TATAGACTTG	120
CTGGATATAG AATTACTGGA TATAGAATTG CCAGATATAA AATTCTTGGT TCAAAGTTT	180
TTTTCTTGA GGACTTTGAA TGTCATCCCA CTGTCCTCTG GCCTCCATAG TTCTCATAA	240
TAAATCAGCT GTTAATCTTC ATTAAGTTTC CTCTGTACAC GAAGAGTCAC TTGTCCTTG	300
CTGCTTTCAA ATTTTCTCA TTTGCTTGG GTTTTCACAC TTTAATTATA TGCCTTCTA	360
TGTGGATCTC TTGAGTTTA TCCTGCTTGG AGTTCATTTGA GCTTTTGCA TCTGTATATT	420
AATTCTTTC ATCAGATTG GAGATGTTT TGGCATTAT TTCCTCAAAG TTCTTCTGC	480
TTCTTCTCT CCTCTCCTT CTGGGTCAAC ACAATGCATA TGTTGGTCTA CTTGATGATG	540
TCTCACAGT TCTTAGACT CTGTTACTT TTCTCATAT TTTTTCTTT CTGTTCTTA	600
AATTGGATA ATTTGGTTG TCTTATATTC AAGTTGCTG ATCTCGAG	648

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GAATTCGGCC AAAGAGGCCCT AGAGGATGGG AAGCTTGGGG AGAGAAAGATA CTGAAATGCT	60
AGAAACTGAG CCAGTAGAGG ATGGGAAGCT TGGGGAGAGA GGACATGAGG AAGGATTCT	120
GAACAACAGT GGGGAGTCTC TCTTAACAA GCAGCTCGAG	160

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCC AAAGAGGCCCT AGAAAACCTC AGGAAAGAAA TTGCAAGACTT CGAACAAACAG	60
AAAGCAAAAG ATTAGCTCG AATAGAAGAG TTTAAAAGG AGGAGATGAG GAAGCTACAA	120
AAGGAACGTA AAGTTTTGAA AGAGTACTAC ACAGCTGCA GAACTTTCC AGATAAAAAG	180
GAACCTGAAG AAATAACAGAC TTTAAAACAG CAAATAGCAG ATTTACGGGA AGATTGAAA	240
AGAAAGGAGA CCAAATGGTC AAGTACACAC AGCCGTCTCA GAAGCCAGAT ACAATGTTA	300
GTCAGAGAGA ACACAGACCT CCGGGAAAGAA ATAAAAGTGA TGGAAGATT CCGACTGGAT	360
GCCTGGAAGA GAGCAGAAGC CATAGAGAGC AGCCTCGAG	399

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCCGGC AAAGAGGCTA	GAAGCATCGA AAGCGTTGGA GAGGTGTTAC CGGTAACGGC	60
GGCGAGAAGG GTGTTCCCGA	ACTAGAGTGG GGCATACATA ATCTTGCTGC TATGCTTCGA	120
AGCTCTAGTC TGAATCAACC	TAAGTTTAA ACAGAAGGTG AACCTCTGAG ATAGAAAATC	180
AAGTATATTT TAAAGAAGG	GATGTGGGAT CAAGGAGGAC AGCCTTGGCA GCAGTGGCCC	240
TTGAACCAAGC AACAAATGGAT	GCAGTCATTC CAGCACCAAC AGGATCCAAG CCAGATTGAT	300
TGGGCTGCAT TGGCCAAGC	TTGGATTGCC CAAAGAGAAG CTTCAGGACA GCAAAGCATG	360
GTAGAACAAAC CACCAGGAAT	GATGCCAAAT GGACAAGATA TGTCTACAAT GGAATCTGGT	420
CCAAACAATC ATGGGAATTTC	CCAAAGGGGAT TCAAACATCA ACAGAATGTG GCAACCAGAA	480
TGGGGAATGCA	ATCAGCAACC CCCACACCCCC CCCCTCGAG	519

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GAATTCCGCC AAAGAGGCC	AAGAAATTAT ACCATTTAT GGAATGTCAA GCTACATCAC	60
CCGAGAACAC CAGTACAGCA	AGCCTCCGCA CAAAAAACTG AAAGACCGCC AGATCGATCG	120
CCAGAACCGC CTCAACAGCC	CTCCTTCTTC TATCTACAA AGCAGCTGCA CAACAGTATA	180
CAATGGCTAT GGGAGGGCC	ATAGTGGTGG AAGTGGCGGA GGCGGCAGCG GTAGTGGTCC	240
CGGAATTAAG AAAACAGAAG	CGCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCCGCC AAAGAGGCC	AAGCCTCGCC TTACACTTAA GTGCACCCGA TCCTGCCTCT	60
GGCATCTCAC AAACGTCACT	CCCTGGAAACA AATTGTGAA GGCCTCCAGA CCACAGTGTC	120
CTCATCTGTA AAATGGGGGT	AGTACTAATC CTTGCCTCAT AAAGTTCTTG GCAAGGATTA	180
GATGAGCGAG CATGTGAGTT	TGGCCTCCGT TTAAACACTC CATAAAGTTT CCTTTAGGA	240
TAACAGCAGG CCCTTTAGA	ACCTTCCAGA GGTACTTAT TCAGATATCC TTAGGTGACG	300
ATTGGGAAGC TGCGTTTCT	TGAGAGCCTC CTGGGTGACA GATGGAGAGT GGCCCTGGCG	360
TGACCCCTTGA CCCTATCCTT	GAGGCTTTC TGCCCGTCTC CTGCGCTCGAA TGTGCTCCGC	420
AGCACATGGA TCAGGATGGG	GAAGGGCTG TGTCACTGGA TACCTTCGGC CCCTGCCAC	480
GTCTAGGCC TGTGAAAACG	AGGAGGGACA GCAGAAGAAAT CGGGAAAGGC TCGAG	535

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCCGCC	AAAGAGGCCT	AAAATTGTTA	ATTCTAGTCA	CCCTGCAGTG	CTATAGAACAA	60
CTGGAACITTA	TTCCTCCCTA	ATCACCGTAT	TTTTGTATCT	ATTAACAAAC	CTCTCCATAT	120
CCTCCCTCCC	TCCCTACCCCT	CCCCAACCTT	GGTAATCACT	ATTCTCCTCT	CTACTTCTAT	180
GAGATCAATG	TCTTTATTTA	CTCGAAGTAC	TCTTAAAAGT	TTAGGACTTA	AGTATTGAA	240
GAAATTCACT	TGCTTTTGT	TTTTATTCTA	CTCAAACTT	TTAATATAA	AGATTTACAG	300
CCCCCCTTA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCCGCC	AAAGAGGCCT	ACAAACTCAA	GATGCCGAG	TGGATTGGAG	GCGAGAGCGA	60
GCTCAGGAAG	TTTCTAAAAC	ATCATTTGCG	AGGAAAGAAC	TGTGAACTCC	TGCTGGTGGT	120
ACCAGAAAGAG	GTAGAGGCTC	ATCAGAGTTG	GAGGACCGAT	GTGTAACAGT	TCTGCCAAC	180
CTCCCTCTCG	CCTCAGCCCC	TTCAGTCCTC	TGTGACGTGC	TGTGGCTCT	ACAGTGGTC	240
TGCCCTTGCC	ACTTCCCCAA	ACATCTCATC	AAGTTTTCC	CCTTCAGATC	TGACAGTGCA	300
ATAGGACAGA	CGTGTGGACT	GTTATAAGAA	CTACTCAGTG	TTTGTCCCT	GGGAAACTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCCGCC	AAAGAGGCCT	ACTCTGACAG	TGTTTCTGAC	CTTTAGCATT	TCTTTTTGAT	60
TCTTTCTTAG	ATTCTCATC	TTCTGCTTAT	ATACCTGTCT	ATTCTTGCAT	GCTGTCTACG	120
TTTCCCATGA	GAGTCCCTAG	CACATTAATC	ATGGTTGTTT	TACATTACAA	GTCTGGTAAT	180
TCCAGCATCC	CTGCCACATC	TGAATCTAGT	TCTGATGCTT	GCCCCTGCTC	TTCAAACCTCT	240
GTTTTTTGTC	CTTATAATCT	TTTGTGAAA	GCGAACATG	ATTCCCTGTAC	TGGCTCTTCT	300
GGAGGCTTCT	GCCCTGTTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

GAATTGGCC	AAAGAGGCC	ACAGATGACT	TCATTTCTCT	TGGATTCCAC	TTTCTCACGT	60
GTCAGAATCG	GAGAGGAAGG	GAGGTGTTG	GATAAGTTTC	AGTTCCACTG	TTTGTACTTC	120
TCGCTGGCT	AACACCCATG	TGGCAAATAG	GTTCATCAT	TTGTTTCAGC	TTAGATTGT	180
TGACAGCGT	TTCTGGAGT	GCTGCTTGA	GAACGATTCT	GAGGAGGCTC	AGCAAGAAAG	240
AGTGTTCAG	TGATTGGGT	GTGCTGTCA	TGGAGAAGGA	AGTAAGGAGT	GGGCAGTGCT	300
AGCAAATTC	CCGGGGCACT	TCTGTCCATT	ATCTCAATAC	CTGGGGTTGA	CATTCTGT	360
CTCAGATCG	GAGTCCTGAC	TACCCCTGC	CTGACCACTC	GAAGTGACTG	CTGCTTAGCT	420
GTATCGTAGA	CACCGCTGT	TTGTGAACAG	ACACCCCTGCT	TCTTGATAAC	ACAAAGGCCA	480
GCAGGGTCCA	CTGCTGTGTG	GAATGGCCTT	CGGCTTTC	TGCCCAGAGC	ATAGAGGTCA	540
TTTCACTAA	TAACATAACT	CTCCTTTGA	TTGAAAGTGT	AAAATGTTG	CTCCCTAAAG	600
CACTTATTTT	TTAGGCTCGT	TCTTCAGATT	TGCCCATAT	CCTAAGCAA	ATGCCTTCAA	660
TATGAAGTGG	ATATTGCTTG	ACCGTAGGG	GCTTGTCCAT	ACTGTACTCG	AG	712

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

GAATTGGCC	TTCATGGCCT	AGTCTTGAAG	GATAAGACTT	GCCCAAGTGG	ATAAGGGCG	60
AAAGGCATCC	CAAGAGGAGA	CACTAACGTG	TGTATAATG	AACGAAGGCG	TGAAATAGGA	120
TGGAGTGT	TGAGGAACCA	CAAGTAGCCT	TCTCTGAGTA	AGAGCATAGG	TTTGTGAGGA	180
GGACCTAGT	TTGTTGAAA	AAAGAGAGTG	ATCAATGAA	GATGAGATAT	CAAGACAGGA	240
GAACCAAGGA	AGAAAAAAAGCA	GAGGACAGCT	GGAAATGAATC	AAACCGAAGA	ACCAAGGATCC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

GGGTTTGT	AATGGAAAGT	TTAAGTAAAT	TATATTGTA	AAAAAGGTA	GATAAACCAT	60
TGTAACACAG	TATTCTAGGC	CGCCAACAAA	AGTGTGACAG	ACACACTAAA	AGCCCTCCAA	120
CTTTAACTTG	TAACGTAGCT	TCATTCTCAA	AGCTGACTCC	TTTTTTTCT	TTTCCCTTT	180
CTTGAGTGT	GTACAGTTAA	AATTTCAAAC	AGCTCCCTGA	CACTGCTTT	CATGTTCAA	240
CCAGCCATT	TGTTGTACTT	TGGTAAAGGA	CCTCTTCCCC	TTCCCTCCCT	ACACATACAG	300
ATACACCCAC	CATAACTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

GAATTCTGGCC	TTCATGGCCT	ACAAAAGGCA	ACAAAACAAGA	TTAACATGGA	ATTATAAAAA	60
TCACTCAATC	CAAAATAAGG	CAGAAGAAGT	GGAAAAGGGA	GATGAAGATC	AGATGGAACA	120
AAGAATATTA	CTAGAAATGA	CTATGTTTA	TAATGCAAAA	TAGTTCAGTA	CAGGAGAAAG	180
ATACAATAAT	TTGAGTGCAT	ATGAACTTAA	AAGAGAATT	CAAATATAT	GAAGCAAAAA	240
TTGACAGAAC	CCAAAAGGCA	ACAAAACAAGA	TTAACATGGA	ATTATAAAAA	TCACTCAATC	300
CAATATCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

GAATTCTGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGGA	GCCTCAAGAA	AAATTAGCAG	60
AGGAAARTAA	TAGGTAGTTA	CTATTTAGGG	AAAACAAAC	TGTTCTAAGG	AATAGAAAAT	120
AAAATTCCA	TGTCTCAAA	ATAATTCTT	CCCTCTCAAT	CTCTCTGAAT	ATCTCATAG	180
AGTATTCAAGG	CCACAGAAAAT	AACTACCATT	TAGCCACTCA	GAGGCTTATA	GTAGTTCTAC	240
TAACCTTAAC	ATTGGCAAC	CAAATTACT	CTAAGAATCA	TCACCCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GAATTCTGGCC	TTCATGGCCT	AGATGGGCAT	TCTGTTTATC	TTACTAGTAG	TACGCAGGGT	60
ATGTTGAAAT	CTCCAACTGT	GATGGTGGAC	CTGTCAACTT	CTCCCTGTGG	TTTTATCAGT	120
TTTCTCTGGG	TATTTTGAGG	CTATTCTGAT	AGGTACATAA	AATACAAAAA	TTGCTATATC	180
CTCCTAATTA	ACACCTTATTA	TCAAATTGTT	ACTAATGCTT	TCTGTTCTA	GGCCATGAAG	240

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

GAATTCCGGCC	TTCATGGCCT	AGATCTGAGC	TCACTGCAAC	CTCTGCCTCC	AGGGTGCAAG	60
CCATTCTCCT	GCCTCAGCTT	CCCAAGTAGC	TGAGACTACA	GGCGTGTGCC	ACACACGTTGG	120
CTAAATTTTG	TATTTTTAGT	AGCTTTTTTT	TTTAAACCTC	GAGTGTCTAGG	TGTGAGGTTAG	180
TAGAAGAAAG	GTAGTGTGTTG	TGACAGCTTG	TGAGTACTTA	ACTAATTCTT	GTTGCATTCA	240
CTATAATATG	GTAGTTGTTG	ATACATTAT	AGGCAATTAG	GAATAGGGAA	CAGAACATCAGC	300
AGATACAAAC	GGAGTTAGAG	ATGTTGCTG	AAGTCATGGA	AAGCCATCAT	TACTTTTTC	360
TTCCCTCCTC	ATAAGGCCTT	AGTGGGTGTC	GCCTTCAGCT	CGAG		404

(2) INFORMATION FOR SEQ ID NO:952:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

GAATTGGCCT	TCATGGCCTA	GAAAAATCAT	GTGGGAAAAC	CACTGCTGAA	AATGGATTAA	60
AATTTCAGAAC	AGGCGGAACA	ACTGGAAAGA	ATCAATGATG	CTCTTCCCTG	TGAATATGAG	120
TGCCGCCGAC	GAATGTTAAT	GAAACGATTA	GATGTGACTG	TACAGTCCCTT	TGGATGGTCT	180
GATAGAGCAA	AGGTAAACAC	AGATGATATA	GCAAGAAATT	ATCAGCCTAA	GCGTTATGCT	240
TTGTCACCCA	AGACAAACGAT	TACAATGGCA	CATCTACTTG	CTGCTCGTGA	AGATCTATCC	300
AAGATCATT	GGACAACTGAG	TGGCACCGAGC	CGGGAGAAGA	CCGCATGTGC	CATTAATAAG	360
GTGCTGATGG	GAAGGGCTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:953:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

GAATTCCGGCC	TTCATGGCCTT	AGTCCCTCTT	CCACTGCATT	TCGGCTTCAT	ACATGCACAT	60
GATGTCCTCC	TCCTTGCACT	CAGTGATGTC	TGGCACCGGG	CGGTACTGCC	GGTGGTAGTA	120
GTAATACCTG	TTCTTTGCGT	GCTGCCGTC	TATAAATTCT	CTCACGAGGG	TCACGGGTCG	180
GTCCACGATG	AGGTCGAACG	CTTTCATCAT	GTAGACGATG	GGATTGGGCT	GCACCGGCGT	240
CGGGCGCGGG	GGCTCAGGCT	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:954:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

GAATTCCGGCT	TCATGGCCTA	AAGATTCTGC	TCTTTATACA	CAGAACTTTG	TATAGAGTTC	60
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TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTT AATTAGAATG	120
TGATTTTTT TTCTTAAACG TGTCTTCATT GGCTCCAGA TTTGCCGTAG AACCCAAGCA	180
AACTGGGTGC TAAAACAGAA AGGCCATAG ATTGTACTTT TTGAGCTGTT TGAATTGTA	240
TACCATATGC ACAACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTGGCC TTCATGGCCT AATCCGAGTG TTTCGCGCAC GTCCTAACGTC GACAGTCCT	60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTTGCT TTTTTCTATA ACATACACTC	120
ACCCGTATG	129

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

GGCTAACAT GGAAATGAAA GACTGATACT TGCTTACCA AAAANANACT TAAGCACATA	60
GATCATAGAC AGTATAAAGC ATTAGACAA TGAAGTCTAC AAAACAAACCA GTTAACAACA	120
CAATGAGAGT ATCAAATCT TACATGTCAA TACTAACCAT GAATATAAT GATCTAACCC	180
CCCCACTTAA AAAGCATAGA GTGGCAAACG GGATAAAGAG ATAAGACCCA ACTGCTGCT	240
GCCTTTGAGA GACCCATCTT GCATGTAATG ACACCCACAA GCTGAAAGTA ATGAGATGGA	300
GAAAGATCTA TCATGCAAA GGAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG	360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAGAACCT CGAG	404

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

GAATTGGCC TTCATGGCCT AGACTCTT TATACAAATTC ATCAAGGTTA AACAAACAT	60
AAAATCCCT TAAAAATAGG GTAATAAAAT AGATGAAATT TGTATCACTC AATTGGTGA	120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT	180
TAGAATTAA ATAAGCTATC TAAACGTGTT AAAATTAA ATCAGGACCT GATTGTTT	240
GCTTCCATT AAATGTACA TTGAATTCTA GACCTGCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT	60
TCGGCCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCTGT GTGAGAAAGG	120
TGATGCCGTG ATTATGCAAG AACAGGGAA AATCTTCAGG AAAGAAAAAG AGATGAAGAA	180
ACGTATTGCT TTCCCACCA GCATTTGGT AAATAACTGT GTATGTCACT TCTCCCTTT	240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAATTA GGCCCTTTG	300
GCCGAAATTC	309

(2) INFORMATION FOR SEQ ID NO:959:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT	60
TAAGGCAATT ATTTCATAGA CCTTACAAC ACCCATATAA CATTATTATC TTCATTTAC	120
AAATGAGGAT AATAATGTTA TATCTCGAG	149

(2) INFORMATION FOR SEQ ID NO:960:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 455 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTTAAT	60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTAAATAG GCATCTTTC CTTATAAAAA	120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTATA TGGTTAATAT TTTAGTGTAC	180
ATTAAGAGCT TAGAGTTCTT TTGTAAATCA AGCTTGTAC AGAACGCTGTG CTTTATTAT	240
TTCATAGTAA TTTCCTCTAG TGGGTCTATTG TATAAACCT GATCATTCTT GTATGTCAT	300
TCCCTTTCTT GCGAAGTGGG CAGCTTGTCTT AGCCATGGTG TTTTGGCTTC AATAGTGAGG	360
TCTCTATTTG GGAATCTCTG AATTTCACAG GAATGAGTAG AACTATATT AACAATGAAA	420
AAAAATAGTAT TAGATTTAG GGCAGCTGGC TCGAG	455

(2) INFORMATION FOR SEQ ID NO:961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

GAATTCCGCC AAAGAGGCCT ACCCTGTCTT TATGCTCAA TGCTTCTTC TCCAGATATG	60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGCTGG TTCTCTGCC	120
GGAACCCCTGC TGCGTTTTG CTGTAGCTCC ACATTCCTGT GCATTGAGGG GTTAACATTA	180
GGCTGGGAAG ATGACAAAAC TCTCGAG	207

(2) INFORMATION FOR SEQ ID NO:962:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCCGCC AAAGAGGCCT ACTGTAGTAT TTAAATATCT GTTACAGGTT TCCAAGGTGG	60
ACTTGAAACAG ATGGCCTTAT ATTACAAAAA CTTTTATATT CTAGTTGTTT TTGTACTTTT	120
TTTGATACA AGCCGAACGT TTGTGCTTC CGTGATGCA GTCAAAGACT CAGCACAGGT	180
TTTAGAGGAA ATAGTCAAC ATGAACTAGG AAGCCAGGTG AGTCTCCTT CTCCAGTGGA	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:963:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCCGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTTCTTC TTCTCCTGGT	60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT	120
GAAGCCTTCG GAGACCCCTGT CCCTCACCTG CGCTGTCTT GGTCGGCTCA TGAATACTCA	180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC	240
TGACAGGGGG AGCACCACACT ACAACCCCTC CCTCAGGAGT CAACTCACCA TATCACTAGA	300
AACCTCCAAG AACCAAGTTCT CCCTGAATTG GTTCTCCTG ACCGCTGCGG ACACCGCCGT	360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCCTCTAC TACTACTCCA TGGACGTCTG	420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:964:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GCTCGGCTCG	CTGCAACCTC	TGCCCTCCAG	GTTCGAGCGA	TCTTCTGCC	TCGGTCTCCC	60
AGGTAGCTGG	GACTACTGGC	GTGCGCGACC	ACGCCCGACT	AATTTTTCT	ATTTTAGTG	120
GAGACGGGT	TTCACCATGT	TGGCCAGGAT	GGTCAATC	TCTTGACCGC	GTGATCTGCC	180
TGCCTCGGCC	TCCCCAAAGTG	CTGGGATTAC	AGGCTTGAGC	CACCGCATCC	AGCCAACATT	240
TTTCAAATAG	AAAATCTGAA	GCTAAATCA	CCCTCTAAAGG	ACAAATAACA	GGACTATCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTCCGCC	TTCATGGCCT	ACTAGATTAT	GGATTTTTT	ATTCATGG	AAGTGAAGTT	60
CAAAGATGCC	AGAGTGGTAC	AGTCGAACA	AACTGCTTG	ATTGCTTGA	TAGAACAAAT	120
AGTGTGCAGG	CATTTCTTGG	CTTAGAGATG	CTAGCTAAC	AGTTGGAAGC	TCTTGGTTTA	180
GCTGAAAAGC	CTCACTTGGT	GACTCGCTT	CAAGAAAGTT	TTCCGGCAAT	GTGGTCCGTG	240
AATGGTGATT	CAATCAGTAA	GATATATGCA	GGAAACTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCCGCC	TTCATGGCCT	AGACGTGATG	TGTTGAGAGA	AGAATGTTCT	AGGCAGAGGC	60
AACAGCAGAT	GCAAAGGTCT	GAAGGGGAGA	CAGACCGAGC	TAGAAAAGCA	TGGCACATCA	120
GTGATCTAAG	TTCGTGTGGT	TTCCTAAGGT	TGGAACCTAG	GGTCAAAC	GAGGATGGGC	180
AGATGAGGTC	GAAGAGGAAG	AGCAGACCCA	GGTCACAAAG	ATCTTTGTG	CTAAGGATTT	240
TTAACGAGGT	AGGAGGAGAG	AGAATATGAG	CCTTGGGATT	TGAAC TGCTG	TGGGTGTACA	300
GAAAAAGAGA	AACTAACGA	GAGGTTAGG	TTTAGGGACG	TGGTAGGCTT	TTGCAGTAAG	360
GGACAAGGAC	AGAAGGCTCA	TCTGAGGATG	GGAGGGACAC	TTTAGAGGCA	AATCCATAGG	420
ATGCAGTGCG	TGAACAGAAA	AGGTGAATCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCCGGCC	TTCATGGCCT	AGTCATTAA	TTAACCTAG	CAAAACTCCA	ATAGTGTAAAG	60
TTAACAGATT	TTGGAAACTG	GTTTAAGTA	GATGTATTAT	AACATAAAAC	AAAGCTAGCC	120
ATTATCAAGT	TATTCCTTG	TTAGCTATT	TTACAGCATG	TGCATGTTAG	GTAGTCATCG	180
TGAAAGCAAG	AATCTTAAGT	TAAATACATG	TTTTTTTGT	TTGTTTGT	TACTGCTGTG	240
CTGATATAATA	CATGATGCTG	TTAGCAGCGG	AACGTATCAG	AGACACGGCA	CCAAAGTATG	300
TTACTGTCGG	CGAAAACCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCCGGCC	TTCATGGCCT	AGACTGCTGG	CATATCCACC	CCACCTGTGC	TGCTGCC	60
GCCAAATCCAT	CAGGGCAGCT	CCGACTCCTG	CAGCACCCAC	CGCCCAGGAC	GTCA	120
CAGGTTTCT	GGCTGCTGGG	GTTCCGACG	AATGGCCCT	TCTTTGGA	AAATGCCAGG	180
GAAGGGAAAC	GGCTGGGCTC	GGGCGCCACA	GCTGTCCCT	CCAGCCAGCA	GGCACAGATG	240
TATGGCGCAG	GAGGGACAAC	TGGCCCCCTGT	GGCCAGCCCC	AGAGAGACGG	GCCCTTCTT	300
TGGGACCCCTG	GCCTCAGAGG	CCTGCGTGT	ACAGCTCAGG	GTCTGGTGG	GCAGGGCAA	360
AACCTGCC	TTTGCAGAGA	TGCCCCAGA	GTACACAGGA	GCAGACGCAC	CACTCGATG	420
GCTATTTAG	GAGGCTGGTG	ACAAGCAAG	CATGGTGGCA	CGAAGGCCAGG	CCCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

CTCGAGGTCC	CTGTCC	TCTCT	TCAATGTGGA	AGTCCTGGGA	GGTCAGTCTC	60
ATGAGAATAA	GGTGTGTAC	TTTCACAGCC	TTCTCA	GACT	TTCTGAGGA	120
CTTGCCAGCT	AGTGGAGTGA	GCAGAACTCC	TCCTGGTT	TGTGGTGT	CTCAGAATGC	180
CCTAGTTCA	TTTCCAGTAA	TACTTTTTG	GGAACATTT	GTGTTCTCA	TTTTCTCAGG	240
TCCCCCAGGC	ACACCATCTT	TCCTCTGCTT	CCTCTCACAC	AGGTGCTGAT	ACTGTGTAGG	300
TTTGGGGCTG	TGTTCTGGC	CCACTCCCCTG	ATATTTCTG	GGTTTGTCA	CTAGTTTCT	360
TAAAAGTATC	ATCTACATGG	TTTGGTTTC	ACTATCTATT	CTGTCTTAT	TTGAACACTA	420
GGGGAAATT	ATTATGCCAA	TCTCACACAT	TGTGTGATTC	CATTAGGCCA	TGAAGGCCGA	480
ATTC						484

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 970:

GAATTGGGCC	AAAGAGGCCT	AGGCAAAATG	AAAATACTTG	TGGCATTCT	GGTGGTGCTG	60
ACCATTTG	GGATACAATC	TCATGGATAC	GAGGTTTTA	ACATCATCG	CCCAAGCAAC	120
AATGGGGCA	ATGGTCAGGA	GACAGTGACA	ATTGATAATG	AAAAAAATAC	CGGCATCATT	180
AACATCCATG	CAGGATCATG	CTCTTCTACC	ACAATTTTG	ACTATAAAACA	TGGCTACATT	240
GCATCCAGGG	TGCTCTCCCG	AAGAGCCTGC	TTTATCCTGA	AGATGGACCA	TCAGAACATC	300
CCTCCCTGCA	ACAATCTCCA	ATGGTACATC	TATGAGAAC	AGGCTCTGGA	CAACATGTTTC	360
TCCAGCAAAT	ACACCTGGGT	CAAGTACAAC	CCTCTGGAGT	CTCTGATCAA	AGACGTGGAT	420
TGGTTCTGC	TTGGGTCAACC	CATTGAGAAA	CTCTGCAAAC	ATATCCCCTT	GTATAAGGGG	480
GAAGTGGTTG	AAAACACACA	TAATGTCGGT	GCTGGAGGCT	GTGCAAAGGC	TGCACTCGAG	540

(2) INFORMATION FOR SEQ ID NO: 971:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 971:

GAATTGGGCC	TTCATGGCCT	AGCCAGTCTC	AGCACTTAAA	CAACCAGGTG	TTGAAGGACT	60
ATGTTCCAA	AAACAGAAGA	GAGTATGGTT	TCCAGATGGT	ATATTGCCA	ATGGTGAAGT	120
TGCAGATACA	ACAAAATTAT	CATCTGGAAG	AAAAAGATGT	TCTGAAGACT	TTAGTCCTCT	180
CTCACCTGAT	GTGCCTATGG	TAAGGAATTTC	AAAGAATACT	TAATTGACTA	AAACAAATTT	240
TATTCGTTAG	ATAATCCCTG	GTGTGATTAT	TAGAGTGCTT	TTTCTCGAG		289

(2) INFORMATION FOR SEQ ID NO: 972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 972:

GAATTGGGCC	TTCATGGCCT	AGAGCTTGGG	AGGTTGAGGC	TGCAGTGAGC	TATGAGCTGC	60
ACCACTGTAC	TCCAGCCTGG	GTGACAGGGC	AAAGACTCTGT	CTCAAAAAAC	AAAAACAAACA	120
ACAAAAACTT	TATTCCTAAA	AAGTGCTGAC	CCAGAGATAA	GAAGCAAGCA	CATGGTTGGT	180
AAAATGACAT	CACTGAGCTT	GCTTATGCA	GGGTTGCC	AAACCTTCAA	TTTGTAAAC	240
TCAAAATATC	TGAAAGCTT	GGTGAGGGGA	GGCGGGACTG	TAACTCAGCA	CTCACCGCAG	300
GGTGAGACCC	TTAGGGCAGC	GGGTGCTACA	CTGAACAAAG	CGGTGAACAG	CCCCCTCGTG	360
AGAGGGGTT	CTTGGCAGAT	GACGCCAGCA	GCTGACAAAC	AGGCAAGTGC	AACTCGAG	418

(2) INFORMATION FOR SEQ ID NO: 973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GAATTGGCC TTCATGGCCT AGATTTGAA AAGATTTCC TAGATTTACT GTGTTCTGGA	60
TCTAGCTTGA ACGTGAATGT TTGTATAGTA CGTTTCTTA ATATTTTTA GTATTCAAG	120
TATATAATCA TACTAAACTT GAGAAACTGG AAGAATCAAG TCTTCCTAG TTCTGTTAG	180
ACTTTCTAGT TTTTTTTAAG GATACTCCA TATCTCTGT AAGCTACACA GTGAGCTTCA	240
TTTTTGACACA GTTATAATAC ACTCTCGAAT CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTGGCC TTCATGGCCT AGGGTTCGAT GATAAGCACA GGCGGCAGCT GGATTGCAAG	60
TGGAGTGTAA ATGCCAGAAA CAGCCCTTTT CTGTTTTGCA TTTAGTCGAG GATCCAACGT	120
TTCATCCCCT TGTCTGTTAG GACTCCATGG TATGGTGGGA GTCATACTGA TGTCTGGAAA	180
CAAAACCCCA TTGCTCTTGA CCCTGTCTAG TGCACTAGTC ATTTCACAGA GGGGTAATCG	240
ATTTAATTGA AACTGAAGTT CAACCTGTGT GTCACAGTC GGCGAAGAT TAAGTTCTTC	300
ACAGCATTCC CTAGATAGCC TTAAAAATAT ATATTCTTT GTTTTTCTT CAATAGTAGC	360
TTCCTAGACC TGCCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 417 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTGGCC TTCATGGCCT AAGAGAAAGA GAGTGAGAGA GAGAGAGAAA GAGAGAGAGA	60
GATGCTGTTG AATCAGAAAC AGATCACAG CCCAAGATT TTCTGTCCC TGGAGTGCCA	120
GCCCGAGAA GCTCCAGGGC TGAGTGTCA GGAGCCAGTT TCTCCAGCCC CTCCCTCCCCA	180
CAACCCCTAG TGGGGAGGGG CAGCTGTCCA TTTGCCAAA GTATTAATGC AACTGAAGCT	240
GTGATATTTC CAACGACTGT AGGAGGAAAA ATTAAGGGGA GAGAGGAAA CAAAACCAAC	300
CAACCCCTAA AATCATTTTC TTATTGTACA TAACGACCTC ATTCTCTGT ATATGCGGAA	360
GATATAACCT TATATTTGGT AAGTGTCTT TGTGCTATTT TATCAGCGA CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTCACCAA TAAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTAT GGCTCATT TTATTTTAT TTAAAAGTAT	120
TAAAATCCA ACAGTAACAG CAATACAAT CGAG	154

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATTGTTCT TTGCTCAAAT AAAACTGTTAA ATTTATCTTG	60
GCAGACTCTA TTTTGATCCC CAAATTTGAT TTAGATTG GGCCATTAAA TTTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAAATAAGT GTTTCTCAAT TTCTGGTGTAT ATGGTTGGC	180
TGTGTCCTCA CCCAGAACATCT CATCTTGAAT TATATTCCCC ATAATCCCCA CGTGTCAACG	240
GCAGGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTTAGTTC TCAGAATTCT TCATATATTT TGGCAGCAGT	60
TTTCCATCA GATTATTTG TAAATATTTT CTCCAGTCT GTGACTTGCT TTTTCATTC	120
TCTTAACAGT CTCTTCACA CAACAGAACT TTTTAATTTT AATGAGGGCTC AACTTAATTT	180
TTTTTCATT AGTAGATTGT GCTTTGGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 534 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

GAATTCGGCC TTCATGGCCT AGAAGGCTTC TGAATAATT CTCAAAACCA	NCTTTCCATT	60
TNAGTACACG ATTGATAAA CATAGCACAT TAGATAGGTA TTTAGCAATT TCTTCTACCA		120
ACTACACTTT GCCCTCACTA AGGGTTAGAG TATGATTGAA ACAATTCT ACATATAAAG		180
CATCTTTAAA TAAGTTTGTT GTTCACTGAA CTGAGACTTC TTTCACCTT GTACCTATGG		240
AAGTTAATCT GAGCATACAC ATATATACAT ACTTGACATAC ATATGTGTAC ATATGTTTT		300
TAAGTAAGTN ACTTTTACCA TTAGAATAAA CCTAGACACT ACAGGGACAA CTCTGGGAA		360
CAGGGCGGTC TGCCCTAACCA ACCCTCTCT AGGGTGGAGGA AGGCAGGTAT AGTCACTGA		420
AGGATGTGAT GAGGCTGTAG TAAGTCTTCT CATCATCTGT TAATCCTGCG TTGCCTGGTC		480
TCACCACAC AGCTACGTGC ACATCTGCTT CCTCAGCAGC ACTGGCCTCT CGAG		534

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

GCTCGAGTGT CGTGCTATCT CTAAATTGTC ATCACTAAGA ACCGCTGCGG AAACAGTAAC	60
TGTTTCTTTT ATTTTTGACA TTTTAGTTG TAATTTATCC AATTCTTTCT TCTTTTGATA	120
AGTCTCCATT CTCTTACTT CACGGGTATT TTCAAATTCA TTAATCATT TATCACAGTG	180
CCACTTGTAA GACCCCTAATG AACGATGTCA CCCTCTTATC AAA	223

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGCC TTCATGGCCT AATTACTTGA CCCGTAATAG GGTTGTTGCC GTTTTCTGAT	60
GCCTAAAGTAT TATACAGAGC CCACAATGGC CAGTTTACTA CCAGAAAGGG CTTCAGTAAG	120
ATATTCTTGG ACTTGATACT TTCTTCAGAT CCTCTTTGTC CCAAGATAAT TTATCCAGTC	180
ATTGGGAATA GTAAGTTCT GTGTAACCCA TCTCAATTAT AGAAGCAAGT TCAGCTTTAT	240
GTATTGTAT GGGGAGTTGA AGATTTCAGAT AGAGGTTTA AGATGTGTGG CATTACTTA	300
AACCATCACA TTTCCTTCTT TCTACGCCCTT CCTGCCGTGA AAACACCTGG GAAGTTCCAC	360
TGGTGTATC CATCCTGATG CTTCAGACCA CCCTCCCTTC TTCACAGACC GTGTCACCTT	420
GCCTGTGGGT GGGGGCTAGC CAGCCACAC CCTCTTTCT GTGCTGCCAG CCAATCTGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

TCCGTGTCCC CTCCCTCCCTC TGCCCCCAGT GTTTCTTCCTG ATTTTTTTTT CCCCTTCCCC	60
TCCCTCCCTC TCGCATTCTC TCCCTGGTT CAGCACAGGT AAAACGGTTC CCCTCCCTCC	120
CTGCCTTCAT GGATCACCAAG CTCACGTCTA GTTGCTTCTC CTTTTCTTTG TGTGTGTGTT	180
TATTTAAAGTT ATTTTCTTC CTCCCTCTCC TTTTCTTTT GGCCCTCCCT CCCTCCCTCT	240
TCTGCCATGT AACTGGAGGA TGTGCTATGA GTTTGCAAAC AGCCGGACTC GAG	293

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GGTGAGGATG GTGGCTGTGG TTGTGTTGGT GGCTGTGATG GTGAAGGTGG CTGTGGTGGG	60
GATGGTACT CTGATGCTAA TGTTGGTTGT GGTGATGGAG GCAGCTGTGG CAAGGATGGT	120
GACTTTGGTG GAGAAGGTGG CCATGTGGG GCTAGTGGCT GTGGTTGTGG TGATGGCCAT	180
GGTGAGGATG GTGTTAAAGG TGGCTGTGAT GAAGATGGTG ACTGGGGTAG AAATGGTGAC	240
TGTGATGGTA ATGTTGGCTG TGGTGTGAA GGGTAGTTAT GGTGAGGATG ATGACTATGG	300
TGGTGAAGGG GCCATAGTGG CAACGGCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCCGCC TTCATGGCCT AGGGAAAGAG TAGGGGTGGA GGGGTAGGAG GATTACTCT	60
TCCACCGAGA GCTACCGCCTA TCCCCTCCCTC CCCCTCCCCC CTACCCGGGC TCCGGCNTGG	120
AGGCAGGGCG TGCCCGGCCT GCTTTGGGAG GGGAGGGCT TCCCTTACAG TGCTGGCTC	180
TGCCAGGACG GCTGTGGGGT CGCCTTACCT CGGGGTATCC ACTCTGCAGT CGACCAGTTC	240
CCGCCAGGAG CAAAGGGTAG GAAGGAGAGC AGGATCTGCT GTAGGAACGC AGCTACCGCG	300
CCACTATCAC GAAGAACACAG CAGGCTCGGG GCACAGACG AACTGGAGAC CGCGCTGCCT	360
AGCTGGTAA CCTGGGAAGC AGAGGGTAAT AAGTGGGCC TTAAGATAAC CCTGTAGCAG	420
CAGCAGTGGC GGCCAAAGGA GGCTGCTCG GGAACAAGCG GCTGTAGTAG TCTGTGGGC	480
GACTGGACTG ACCGAAGCCA AGGCAGTTTA GTGCCTCTCG TGTCTTATT TTTAACCTC	540
TGACTATGCA ATTCTGAAAC CTCCCCCATT CGGGGGACCA GACAGCCTGA TAGACACCTT	600
CCACTCTCCT TCCTCCCGCC GTGGTCTCGA G	631

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTGGGCC	AAAGAGGCCT	ACTGCCTCGG	TTTCTACCTT	TGCCAATGA	GTTGATAGAT	60
TATCGCTTTT	TTTCCAGCTG	TCATACTCTA	GGAGTCTGAA	TTGTAAAATC	AAAGAAGCAT	120
TTCCCAGAAA	AGTTTTGTC	AAAAATTGTA	TTTACATAAC	CTCAGAAATG	TGTATTGCTT	180
TAAAAATTAT	AAAGTTCATG	GACCATACCA	AGCAGCTGT	ATACCATTTC	TAACCCAATC	240
ACTCCCTGCA	AAGATAGATC	TCTTTTTAT	AGACAGAAAA	AAAATTCAA	GAGGTTTGTT	300
ACTTGCCCCA	GGCCACCACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTGGCT	TTCATGGCCT	AAAATGTTT	TCAATTAAAG	ACTTAAATAT	TACACTTTA	60
AAACTTTTA	TTATGGAAAT	CTAAAAAAA	TTCACCAAT	GAGAGAGAAC	ATTACAATGA	120
ACCACACAT	ACCCATCACC	CATTTCAAC	AATTATCAAC	ACATGGCTA	TCTTGTTC	180
TCCATACCTT	CAGACACCCCT	CCGTCACAA	ACTGGGTAT	TCTGAAGCAA	GCCTTCGAG	239

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

AAAAGTTCA	GGACTTTGCA	CCCTGTGGGG	TACTCAGATG	TCCAGCCGA	CTCTCTACAT	60
TAATAGTAGG	CAACTGGTGT	CCCTGCAGTG	GGGCCACCA	GAAGTTCCG	CCAACCTTTA	120
CTTTGCTAGT	GATGTGTNGG	ATCACTGGGC	TGACATGGAG	AAGCTGGAA	GNGACTCCNA	180
AGCCCACCCC	TGTGGTGGGT	GAATGGAAA	GGGAAAGAAT	TAATGTGAA	TTTCAGAGAA	240
CTGAGTGA	ACAGCCACCA	NGCACCAAC	TTCCTCTCGG	GAGCCTGTGG	CTTGCAGCGT	300
GGGGATCGT	TGGCAGTGAT	GCTGCCNGA	ANGCCTGAGT	GGTGGCTGN	GATCTGGGC	360
TGCATTGAG	CAGGTCTCAT	CTTTATGCCT	GGAACCATCC	AGATGAAATC	CACAGACATA	420
CTGTATAGGT	TGCAAGATGTC	TAAGGCCAAG	GCTATTGTTG	CTGGGGATGA	AGTCATCCAA	480
GAAGTGGAC	CAGTGGCATC	TGAATGTCCT	TCTCTGAGAA	TTAAGCTACT	GGTGTCTGAG	540
AAAAGCTGCG	ATGGGTGGT	GAACCTCAAG	AAACTACTAA	ATGAGGCATC	CACCACTCAT	600
CACTGTGTGG	AGACTGGAAG	CCAGGAAGCA	TCTGCCATCT	ACTTCACTAG	TGGGACCAGT	660
GGTCTTCCA	AGATGGCAGA	ACATTCC	TCGAG			695

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GAATTCTGGCC	TTCATGGCCT	ACTCAGAACAA	ATCACTGCAT	ATCCCACATCTT	AAAGGCAAAA	60
CCCAAACCAG	AAAAACCCCA	CTCAGGTCTT	GCTGACCCAA	CACTACAGTC	ACTGTATTG	120
AGACCCCTTT	TTCTTGAAAAA	AGGGACTTCA	CTTTTTGAG	CAGCATCTA	TGGTCTTTC	180
CACACAGCAA	TTGACGCATC	TCACGGCACT	GCTCTCTGCT	GGGCAGAGAG	CAAACACAGA	240
CAGCCACCAT	CCCCATATTTC	GTAGTAAGAG	AAACTCCAGA	AACCGAGCCA	CCGTCACCCCT	300
AGACCTGCCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GAATTCTGGCC	AAAGAGGCCCT	AGGAGCTCCC	CCATGGATCA	TGGCGTTAAT	GTTTACAGGA	60
CATTACTAT	TCTTAGCATT	ATTGATGTTT	GCTTTCTCTA	CTTTGAGGA	ATCTGTGAGC	120
AATTATTCCG	AATGGGCAGT	TTTCACAGAT	GATATAGATC	AGTTTAAACAC	ACAGAAAGTG	180
CAAGATTCTA	GACCCAAACCA	AAAGCTGAAG	AAAAGTATGC	TTCATCCAAG	TTTATATTTT	240
GATGCTGGAG	AAATCCAAGC	AATGAGACAA	AAGTCTCGTG	CAAGCCATTG	GCATCTTTT	300
AGAGCTATCA	GAAGTGCAGT	GACAGTTATG	CTGTCACCA	CAACATACTA	CCTACCTCCA	360
CCAAAGCATG	CTGATTTTGC	TGCCAAGTGG	AATGAAATTG	ATGTTAACAA	TCTGCGCTCT	420
TTAGCATTTGT	ACTGTTTGTG	ATGCCAGAA	GACAAAGTTG	CCTTGAAATT	TGTCTTGGAA	480
TATATGGACA	GGATGGTTGG	CTACAAAGAC	TGGCTAGTAG	AGAATGCACC	AGGAGATGAG	540
GTTCACATTG	GCACATTCTT	AAACAGGTTTT	GCCACTGCCT	TTGACTTTTT	ATATAACTTA	600
TTAGATAATC	ATCGAAGACA	AAAATACCTG	GGAAAAATAT	GGGTTATTAC	TGAGGAAATG	660
TACAGTATT	CCATGGTCGG	TCTCGAG				687

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

GAATTCTGGCC	AAAGAAGGCC	TAGAGCCCTT	CTGTCCTTC	TACCATGTGT	GGATGCAGTG	60
AGAAGGCACC	GTATCTCTGA	AGCAGAGAGC	CCGCCCTGGA	CACTGGATCT	GCTGGCACCT	120
TGATCTTGG	CTTCCCAGCC	TCTAGAACTG	TGAGAAATAA	TTTTTTGTTG	TTTACAAATT	180
ACCCAGGCTA	AGGTGTTCA	TTGTAACCTG	AATGGACAA	GCTGGTGTGA	CCCTGTTGGA	240
AAACTGGCAG	TATCTACCAA	AAGCGAACAA	TACGTATAAA	CTGATCCAGC	AGTTCACACTC	300
CTGGGTATGT	ACACCAACAGA	AAGCTATGTC	CACCGAGACA	TTGGCAAGAA	TGTTCTAAC	360
CACACGCTGA	CTGTAGCCCC	AAACCTGAA	CAACCCAAAT	GTCCATCCAC	CAACCCAAAT	420
GTCCACATCCAC	AGTTGAAGCT	ACAGTGAAGT	CACAGGGTCG	AATACTACTG	CACAGCAACG	480
AATATGAATG	AAAATATCGC	TATGCACAGC	AACATGGATA	AATTCACAG	ACATGAGGTC	540
AAGAAAAGA	GGTCAGAGTC	CTCATCATCA	AGAGAGAATT	CATTGTATGA	TTCTCTTCCT	600
ACAAAAAGTA	CAGAAATAAG	CAAAACTGAT	CCATGGTGT	AGAAGCCAGG	GGAACAGTTA	660

ACAAGGGAGC ACTCGAG

677

(2) INFORMATION FOR SEQ ID NO:991:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

GAATTCTGGCC	AAAGAGGCCT	AAGAAGCTGC	TTCTCTCTGG	GAACAAACCGC	CTCCCGCTCC	60
TAGCAGGTTG	CTACTGCCCC	GAACCCGCGC	TGCAGGGAAC	AGCGGGGCAA	ACAAAACCAA	120
TAGAGGCCATG	GCGACTCCCT	CTGCTGCCCT	CGAGGGCCCTT	ATGAATGGTG	TGACAAGCTG	180
GGATGTACCC	GAAGATGCTG	TTCCCATGTGA	ACTGCTTCCTT	ATGGAGAGG	CTTCATTTCC	240
TGTGATGGTG	AATGACATGG	GCCAGGTCTT	CATTGCTGCC	TCCCTCTATG	GCCGTGGCCG	300
CCTGGTGGTC	GTGTCCTCATG	AGGACTACTT	GGTGGAAAGCC	CAGCTCACGC	CCTTTCTCCT	360
GAACGCAGTC	GGGTGGCTTT	GCTCTTCCCC	TGGGGCTCCC	ATTGGTGTAC	ACCCATCCCT	420
GGCACCTTTG	GCCAAATCC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:992:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

GAATTCTGGCC	TTCATGGCCT	ACTGTGATT	AAAATCTTGC	TGTGTGGCTT	GGGTGTTTG	60
TGTTGGTCC	AAACCCCTGAA	TCTTTTGGGG	TCTTCAATT	GTGGGCATGT	CAGTGGAAAT	120
TCTAAGCTT	GTGTTAATGTT	GTGTTGTTGT	CTGTCCTGCT	CTGTCGAGT	GTGTTAGAA	180
ATTGGCTCT	CTGGGGTCT	CGCTCGTCT	CTGGAAGGTG	GGGTTATAGA	CATGCTGGTG	240
AATTCTGAAT	GTGTTATAAA	TTAGACTATT	AACGGAGTTA	AATTGAAAGAA	ACCTTCTGTC	300
ATAAGACCTT	CCAGGAATTC	CATTCCAAAT	GAGGAATGC	ATAAAAGACTT	GTCCACTTGG	360
CAAACATTGG	GTGTTTGGGA	GGTGGACTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

GAATTCTGGCC	TTCATGGCCT	AGGCGGCTCC	CTTGGTCTGT	GTGCTGGTGG	TGGCTGTGAC	60
AGTGGGGCG	GCCTTGTTCC	GCTCCAGTCT	GGCCGAGTTC	ATTTCCGAGC	GGGTGGAGGT	120
GGTGTCCCCA	CTGAGCTCTT	GGAAGAGAGT	GGTGAAGGC	CTTTCAGTGT	TGGACTTGGG	180
AGTATCTCCG	TATTCTGGAG	CAGTATTCA	TGAAACCTCCA	TTAATAATAT	ACCTCTTCA	240

TTTCCTAATT GACTATGCTG AATTGGTGT TATGATAACT GATGCACCA CTGCTATTGC CCTGTATTT GCAATCCAGG ACTTCATAAA AGTTGTGTTT AAAAACGAGA AACCTCGAG	300 359
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(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCCGCC AAAGAGGCCT AGACTGTCA CTGTGAGTGG CCAGTACAAC AAATGCTTG GCTTCAGTT GTCTTCTGA TGTCTTGCAA CATATCATCG TGTTGATTC TCGAG	60 115
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(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCCGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATT GCTGGGATAT CCTCTCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG CTGGCCCCGC ACCCTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCCTGGT TCACCCCTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTTCCCTT CCTCTCTGTC ATTAAAACCTG CACAGCCCCC GGGGAGATGT TGAACATGCC AGGGTCAAT CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCCTC TTCAGCATCT CATGGACTCT CAGCTCATGG CTCTGTGGCT TGCCCTCGAG CTTCTGGTGG TAGTCAAAGG TAAGCCGTGTC CAACACCGCC TGTTCCTCCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTGTGTC AATGTCGATG GGCTCTTCTC CCTCCAGGAT GGCCTTCCAC CAATACTCGC CCACCTTGCT CAGGTTCAACC AAAACGCACT TCCCGGGCTC GAG	60 120 180 240 300 360 420 480 540 600 633
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(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCCGCC AAAGAGGCCT AGTGATTCT CAGITCATGG TGGAGTCATT CAAGTTTATT TCTGGCATCT TGGCAGCCCT GAGTGCCTG ATCTCTCTG AAATTCGCA AGTCAACATC ATGACAAAAA TGGATCTGCT GAGTAAAAAA GCAAAAAAGG AAATTGAGAA ATTTTTAGAT CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTGACT TAAGAAGCAA AAAATTCAAG AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTCG ATTTTACCT	60 120 180 240 300
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TACGATCAGT CAGATGAAGA AAGCATGAAC ATTGTATTGC AGCATATTGA TTTTGCCATT	360
CAATATGGAG AAGACCTAGA ATTTAAAGAA CCAAAGGAAC GTGAAGATGA GTCTTCCTCT	420
ATGTTGACG AATATTTCA AGAATGCCAG GATGTACTCG AG	462

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCTGGCC AAAGAGGCCT AGCTGGTAAC ACATGTGAAC TCAGGTAAG TCATCGAGCA	60
TTTTACTGAC TCTATTCTC AATAAAGTAC TGGGAAAAAA CTCATAAGAA TGACAAAAC	120
AACATACTCA GGTATGCGAG CAGAAGCCTC TGACACAGCT TGTCTTCGGG GCTTAACTAA	180
ATGATCTATT TTAATGAGGG AATCCGTGGA AAGGCATGCG TTTTCAGGCT CATTTCCTGC	240
TTCGATGCTT TGTCAGAGA GTTGAATCT CAACGTGTG TTTCATGTGAG GTCCTTAAG	300
AGGGTGACAT TCAACATCCC AAAACTGGGC ATAATCCCC CTACCTCTGG GCAAAAAATGT	360
GATGGAGACT TTTGGATCC CATGGCTTC CAGCAGACCA GAAATAGGAG AACATCTGAA	420
TGCTGCATAC GTAGCTCTAA AAACATCTCC ACTTTCATCA ACTCCCTGGA CATAAGGTGG	480
CACACACAGAC GTGAAATGGC ATCTGTCATC TTTAGCGCCA CCTTATGTCA AGGGAGTTGA	540
TTCTCGAG	548

(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCTGGCC AAAGAGGCCT AGTTTCCCTT TCTGTATTTT ACTACTAAAT TAGAAAGCAC	60
TGGTTATGTA ATAAGTTACT ACATTCGTTT GTTGAGTAA AAACAAGAGT ATATATTTTT	120
CTTGTTCCTT ATTNCCTAAA CCCTTAACCTC CTGCTGAGGT CATAACAACC TCAGTCTAAG	180
CTCTGTGTCC ATCATACTGT TAACCTAACC AAATGGGTGG TGGGGGTGG AAGGTAATA	240
CAGTCCTGCC ATTGCCTTAC AGTAGGAGAG TCCAAACAGA ACACCTTTT GAGTAGCAAT	300
TATTTAATTG GCCCAGTCAA GGCACCGTGT TTATATACTA TTTCACATTG AATTGATTA	360
TGCCCTACAG ACCTGGCTGG TCAAGGATT GATATACACA TATTGGCTTG GGATTGAGC	420
TTTCTTTTTT ATTAAATAA AAATTTATAT ATATATTATA TATATACATA TATACATAGC	480
TATATCTGTA TATATATTGG GTATTTTA AGGATTTTT CGCATGAGCG CAGCTGTTGC	540
GATAATTGA CCGATTGGG GGTATTCTCG AG	572

(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCCGCC	AAAGAGGCCT	AGAGGGAGC	ACGTCTTTC	CTTGAGTGTA	ATTCACTAAT	60
GACTGTGGTT	CCAAGGAGGT	GCGACCTTTA	AAGGAAATTG	GCCCCTCTTT	GAAGGCAGGT	120
GAGAACATCG	TCTCAGTGAC	AACCCAGCCT	GATTTGGAAG	GGGGGAGTCA	TAAGGGTTTT	180
CGCCCCAGCAC	ACCAGGGTTG	CAGCCCTGCC	AAGACCTTCC	ATAGCTATT	CTGCCGGCTT	240
GCTTCTTCC	CTTCCCAGCC	ACGATGAGGC	AGCTGAGGGT	TGCCACCGAA	ACCGGCTCTG	300
TCCCTCCACT	GGAGGCTGCC	AGCTCTGATT	TCCTGCAGAG	TTAAGAAGGA	GGCCGGCAGTG	360
GGGGTCACCC	AGGCCTGAAG	ATGGGTTTC	CTGGGGATAT	CCTGCCCTCT	GCCAATCACA	420
GCGTCTCTCT	GGGAATCTTG	GGGGTCCCTG	GAGGCTGAGG	CCCGAGGAAG	CCCCAAACC	480
CCACTGCTGC	TCTGAGAAGA	GACTAGCCTC	TGGGACATTC	AGAGGCTCTGG	GGTTCTTTTA	540
TCTCCCTCCA	GCTAAAGCTA	GAGGGACCTC	ATTATGTGTC	TTACAAGATG	TACCTAAAC	600
CGTCGATTGA	ATTCTAGACC	CGCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCCGCC	AAAGAGGCCT	ACCTGTATGC	TATTAACACT	CACCACAGCA	GAGAGCTGAG	60
GATTGTGGTT	GCATTCTCGA	ATAAACTGCT	TCTGATCACA	AGAAAACACA	ACAAAGCCAAG	120
CGGGGTCAACC	AGCACCTCAT	TGTTATCTCC	CCTGTCAG	TCACCTGTTG	AAGAATTCCA	180
GTACATCAGG	GAGATCTGTC	TGTCTGACTC	TCCCAGGTG	ANGACCTTAG	TGGATGGGCC	240
AGCTGAAGAG	AGTGACAATC	TCATCTGTGT	GGCTTATCGA	CACCAATTG	ATGTGTTGAA	300
TGAGAGCACA	GGAGAAGCCT	TCAGGCTGCA	CCACGTGGAG	GCCAACAGGG	TTAATTGTTG	360
TGCAGCTATT	GATGTGTACG	AAGATGGAGA	AGCTGTTG	CTGTTGTTT	ACAACCTACAG	420
TTGCATCTAT	AAAAAGGTTT	GCCCCTTTAA	TGGTGGCTCT	TTTTGGTTC	AACTTCTGC	480
GTCAGATTTC	CAGTCTGTT	GGAAACCAGGC	TCCCTATGCA	ATTGTCTG	CTTCCCCTGA	540
TCTCCCTGCC	TTCAACCACCG	AACTCGAG				568

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCCGCC	AAAGAGGCCT	AGTAATACTT	AAAGTGAAT	TGTTCCAAGG	CTTTGTTTC	60
CATCATCACA	ATATTTATAA	AGAAAGAGCT	ATGTTTAGGG	TGAAGAAGAT	ATGGCACAAG	120
TAATATGTAA	AGAACTTATG	ACTTCGAT	CCTCTACCAA	ACAGTAAGCT	GCCGTACAG	180
CTGCACACAG	ACGGACTTTA	CACAACAAAC	TCTGGAATT	CATCATGAGT	GAGATCCAGA	240
GAAAAGTATT	TGCTGGTTCT	TTTGACTGGA	AAAGCATCTT	GGATGTTGAT	GCACTGCTGG	300
GCCAAGCAAC	TGTTGCAATA	GAGGCCTTCC	TCATCCAGT	CATGCCACA	TCCAAAGGTG	360
TAACTCTGAG	CAGTGTCTG	ACACAGACCT	GCAATGCGCA	GGAAGTCTTT	CTGGTAAAGT	420
CTGATGTCT	CGAGGCTCAA	GCTGTGTCGA	TCAGTGAGG	TCTTTGGTTT	CCGACATATA	480
GTCGTGGAA	GAGAACATGAGT	ACTCTGGCCA	CGAAGCTTAA	CAACTGTTTC	TGAAGAGCTC	540
GAG						543

(2) INFORMATION FOR SEQ ID NO:1002:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 592 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

GAATTCCGCC	AAAGAGGCCT	AATTCCACTT	ACGAATTAAC	ACTGTGTACA	TGGCACCTTT	60
GGGCCCATCT	TGCGCTTGAAA	GTCCTGTTG	GATGGAACAG	TGGCATTTTC	CTTCCTTTTC	120
TCAGGACTGC	AAACAGACCT	AATATTTGGC	CTTGCCTTG	CCTGGGAAGC	TGCTGCTGAG	180
TCTTGCTCTCA	GCCTGGCTGT	GCATTCGGAG	CGGCTGCCCT	CCCCTGCCCT	CAGCAGCTGG	240
AATCAATCTG	CCCACCTCT	TAAGAAGCCA	CTTCATCAGC	GGTCACCCGG	CAGCTGCTCG	300
CCTCCCAGGG	CTGCCGGGCT	AGGGCTTTAT	CGCATTTCAGA	TTTCCTGTGTC	360	
TGGGCTATGC	CCCTCGAAC	GTAACAGCAC	CGCTTGCAG	CAGGGAGGAG	ATTCACCAG	420
GATATGGAGG	GGACAGGAGA	AAAGCCCTCC	TTCCCAGAGT	CCACTGTCTAT	TCAGGATTTC	480
CTCTCAAAGA	GGCAAGAAAT	CTCTAAGAAT	GAAAGGAGGT	GTGTTGTTGT	TGTTGTTGTT	540
TTTTGTATGT	ACTGGGAGGA	AATGGCTAAT	CTTGGGTATG	CACACGCTCG	AG	592

(2) INFORMATION FOR SEQ ID NO:1003:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 584 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

GAATTCCGCC	AAAGAGGCCT	AGGCTCCGTC	TGTTGGGGGG	CGAACACGCC	GCGGTCCCTCG	60
TCGTGTGAAG	TAAGAACTCT	GCTAGAGAGG	AAATGGCTGC	TTCATCATCA	TCCTCCTCAG	120
CTGGTGGGGT	CAGTGGAACT	TCTGTCACTG	GATCTGGTTT	CAGTGTCTCA	GACCTTGCCT	180
CACCAACGGAA	AGCCCTTTTC	ACCTACCCCA	AAGGAGCTGG	AGAGATGTTA	GAAGATGGCT	240
CTGAGAGATC	NTCTGCGAAT	CTGTTTTAG	CTATCAAGTG	GCATCCACGC	TAAACACAGGT	300
GAAACATGAT	CAGCAAGTTC	CTCGGATGGA	AAAAGTAGCT	GGTTGGTAG	AAGAGCTGGA	360
GGCTGACGAG	TGGCGGTTTA	AGCCCCATCGA	GCAGCTGCTG	GGATTACCCC	CCTCTTCAGG	420
TTGATACTGC	CTGGATGGTC	ACCTCTGGTG	CGCAGCAAGT	GCACAGGAG	TGGGGACTT	480
TCTCACAGCT	TACATAGCCA	TCCAGAGATC	CACAGCTACG	TCACTGAATT	GTAAATGCAC	540
ATTGTACTT	GGTTTCTCTG	TATCTATTCA	CAGGCGAACT	CGAG		584

(2) INFORMATION FOR SEQ ID NO:1004:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 440 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

GAATTCCGCC	TTCATGGCCT	ACTTTCTCAT	TCCCTAAGTC	ATTAGAAAGC	ACCAGTTCTA
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60

ACTCCAAATG ATGACATGGT CTTATTTAT CTATTAACCA TAAGCTTACA GATTCTAGTG	120
AAGAAAAAAC TTAGGAGGC TACATGGTCT ATTGGAGAGT GTAGGCTCTG CAGTCAGAAG	180
ATCCCTACCC AGGCTTCGTG CTTTCTCAGT AAGACTTGGG ACCACAGCAA GGTCCGCAAT	240
CTCCTGAGGC TCTGTTTCT ATGGTGGGA TAACATGGTA AGTTATTTTC TTCTAAGTAG	300
TCACACATGG AAATCTTATC TAAAATTTA TACCATTAAC TTTTATTCA CTTATTAACT	360
CATACCATTA ATACTTACT TTAGCTATGT TTGGTATGCA TGAGTTGATG AGTGATTAGA	420
GTACTATGAG CGATCTCGAG	440

(2) INFORMATION FOR SEQ ID NO:1005:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

GAATTCTGGCC TTCATGGCCT ACTCAGTTGC AGATTCTGGC CAACATGGAC AGCCAGCTAA	60
AAGAGCTACA GAGTCAGCAT ACCCATTGTG CCCAGGACCT GGCTATGAAG GATGAGTTAC	120
TCTGCGAGCT TACCCAGAGC AATGAGGAGC AGGCTGCTCA ATGGAAAAG GAAGAGATGG	180
CACTAAAACA CATGCAGGCA GAACCTGCAGC AGCAACAAAG TGCCCTGGCC AAAGAGGTGC	240
GGGACCTGAA AGAGACCTTG GAGTTGCAG ACCAGGAGAA TCAGGTTGCT CACCTGGAGC	300
TGGGTCAGGT TGAGTGTCAA TTGAAAACCA CACTGGAAGT GCTCCGGAG CCCAGCTTGC	360
AGTGTGAGAA CCTCAAGGAC ACTGTAGAGA ACCTAACGGC TAAACTGGCC AGCACCATAG	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:1006:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 402 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

GAATTCTGGCC TTCATGGCCT AGAGTAGCCA GGGAGCTGGA AGTTCCACAG ATTGGTTTA	60
ATAACAAAC TCCCTCAATG ATGAGTGGTC TTTTGAAGAG CATGGTTAGA ACTTGGGATT	120
GTGCTCTCA TGACTACAAA TGACTTGTA GCTTAGGTGC AAAAGGGTAG GTCAGTGGGT	180
AGCTAACTAC TGAGGATTGA TTTCTTGAC GCTGGTGTAA AAGTGTACCC CAGAACTGGC	240
ATATAAAGTG GCTCATTCA CCAAGTATCT TCCCTTCCTT TTTACAAAAT CCTTGGCTGT	300
TGTGGGGCCT ACATCTCTTC ATGATTATTA TTGCATCTGG TGTCATGTT TTCCAGCTGG	360
TGTACTGCTT CCCTGTAGGC TTCTTGATGT TCACTCCTCG AG	402

(2) INFORMATION FOR SEQ ID NO:1007:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 456 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTGGCC	TTCATGGCCT	ACTGGTGCCA	CGGGAGGCAG	ACACCAAGTT	CTGGGGTCTC	60
CAGCTGCAGT	GGGTGGCCGC	CAATTGCTTC	TCTCTGTCCA	GACTAATGAG	AACATGGAGA	120
TCACCACTGC	ACTGCAGTTG	GAATAGCACG	TAAAGAGGGA	GCTGGGAAAG	AAGCTGGCA	180
AGCTAAAGGA	CATGGTAACC	CTGCCCTCATC	CAAGAAGAGC	TGGAAGGCCG	GCACCCAGCT	240
CTGGGGAGGG	GAGGTGTGAA	GCCAGAGGA	GCTCAGCCT	GGGGGACAGG	TGACCCCAGC	300
ACCCCTCAGG	GCAGTCCTGT	GACTGTTCT	TGCTTCCCGC	CCTCTGACAT	TTAGTGGTGG	360
GTTCGTTCTT	CCTAGGTCTG	GACATCATCA	TCCCAGCTGG	AGTCATGGAG	CCTCCAAAC	420
ATAGGGAAAG	AGATGGTGGT	ATAAGAGGCT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GAATTGGCC	AAAGAGGCCT	AGGATGGCTG	TGTTTGACGG	GTGTTGCTCG	TGACAGTTGG	60
GGTCCTCCTC	AGCATCAGTC	TTGACATGGC	TGCAACTGGG	GGGGTCTCTG	GGATCCTCCC	120
GGAAATCTCTT	CCTCAGCATT	CGCTCATGAT	AAGTTTTCAAG	GTGTCCTTGAT	GGTTCACTGCC	180
TGGAGAAACA	TAAGCATAAAC	CTCTACCCCA	AGTTATTATT	TTACCTATTTC	CCCAACTTTC	240
TGTTATCAGG	TCTCTCCACC	AAACCAGTTG	TTCTGCTTCT	GTCTTTGCAG	CTGGTTTCTG	300
TAAGATGCTGT	TCAGCTGCTG	ATAAGATCCG	GCCTTTAGGC	AGGCTCAAAA	AATTAAAGT	360
TAATAATGCG	ATTCAATTGC	TTATGGGGTG	TCCGTAGTA	CCTGTTTCC	CCCTTTGCT	420
TCTGCACTG	CTGTTTCAGG	GAGAGATTCA	TTCTTCCAC	TATGGCCTGT	CCTTCAGAAT	480
TATATGGAT	ATCAGTAATG	TGTTTAATAT	TCCGTATAGA	AAAAAAATTA	GCTAGAGCTT	540
GAGAAATTAGG	TTCCAATCCT	CGAG				564

(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GAATTGGCC	AAAGAGGCCT	AGAAAAAGAT	GTCATTCCGT	AAAGTAAACA	TCATCATCTT	60
GGTCCTGGCT	GTGCTCTCT	TCTTACTGGT	TTTGCACCAT	AACTTCCCTCA	GCTTGAGCAG	120
TTTGTAAAGG	AATGAGGTTA	CAGATTCAAG	AATTGAGGG	CCTCAACCTA	TAGACTTTGT	180
CCCAAATGCT	CTCCGACATG	CAGTAGATGG	GAGACAAGAG	GAGATTCTG	TGGTCATCGC	240
TGCATCTGAA	GACAGGCTTG	GGGGGGCCAT	TGCAGCTATA	AACAGCATT	AGCACAACAC	300
TCGCTCCAAT	GTGATTTCT	ACATTGTTAC	TCTCAACAT	ACAGCAGACC	ATCTCCGGTC	360
CTGGCTAAC	AGTGAATCCC	TGAAAAGCAT	CAGATACAAA	ATGTCATT	TTGACCCCTAA	420
ACTTTGGAA	GGAAAAGTAA	AGGAGGATCC	TGACCGAGGG	GAATCCATGA	AACCTTAAAC	480
CTTTCGAAGG	TTCTACTTGC	CAATTCTGGT	TCCCAAGGCCA	AAGAAGGCCA	TATACATGGA	540
TGATGATGTA	ATTGTGCAAG	GTGATATTCT	TGCCCTTAC	AATACAGCAC	TGAAGCCAGG	600
ACATGCAGCT	GCATTTCAAG	AAGATTGTGA	TTCAGCCTCT	ACTAAAGTTG	TCGATCTCGA	660
G						661

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GAATTCCGCC TTCATGGCCT AGGAAAGATT TGACTGCTTC TCTCATGCAG GGGATAAAG	60
CAAAGGCACG TCGAGAGGGA AGTAGGGTA GAGAGAGGCA AGTTAGCTTC AGAGAGATT	120
ATTTCACCC AGTTCTGTTC TACTCAGCCT GACGTTTAT CATCTTTTG AAAAGTGGCG	180
TGAAGTGGTG TCGAACACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA	240
TTTCATATGA TATCCTATGT GTGCTTCCC CTTCCTTCTT AGGAGCTGGA AGAGGCAGAA	300
TTGATGTCCA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 244 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GAATTCCGCC TTCATGGCCT AGAAACATGC TAGACATTT GAAGAACCCAG CAAGAATGTT	60
AGTGTAGCCA ACAGTGAGGC AGGCAGAGGT GAGTAAGGTA GATTAGTTCA GGGAAAGAAA	120
CATAACATTA TTAAATCCAT TGTGGGCCAC ATTGCACTAT GATAACACTA TCATGTCATA	180
GAGTCTCACC ATTGTTAACG ATGTTAAAT TTTTAATAC GAATATATTC TCACACCCCT	240
CGAG	244

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 355 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

GAATTCCGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTGGAT AAAGAGAGAA	60
TGGATAAAGA TCTGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAACTG	120
AGAGTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCTTAA GGCTCTGGTG	180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAAGTACA TGAAATTCTG GCAGGTGATG	240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG	300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCTGGCC TTCATGGCCT ACAGCCTAAA TGTTTTATTT CCTGAGAGGC TGGAATCTGT	60
ATTTGTGGTA TCAATCAGTC AACTGAAATT TATTAATGTC CTGCTGTGAG CAAGGCCTAA	120
TGCTGAGGGTA TGAAAGAAG AGTGAGAACG TAGTCTGGTT GGGGTNATAT GACATGGCAA	180
GTCATAGAAT GAAGAACCGT ATTCTTGTG ATATGAAAGC TGCAAGATTAG TGTGGTTCTA	240
AGTAGAGGCC AGGGTCACTG GACTCTAGGA TTGCAGGGTT GGCTGGCTTC CCAGAGGCTA	300
AGAATTTAAT TTGGATCTTG AAGATCTGGT CCAATTCAA CANGACTCGA G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCTGGCC TTCATGGCCT AGGCCTTGTA TTTTTCTTA TTTTCTGCTA AATTAGAAAG	60
AAATTGCTG TTCAAAATAT ACTCAAGCTG TTCAAGCTT CAACAAAAAG TAGTGACTG	120
AAAAGTAT GTTAACTAT GCTTAAGTTA ATATTTATAG TAATGATAGA AGCCATTATA	180
TTGGCAATAT ATCACTTCT GATTTCCACA CCAGGCATTC CCACATGCAC AAACAGGTGT	240
GTGGGAGGAA GGAAATGGG CAAAATGAT TTCCCTCAAG AGGCTACTGA GAATGAAAAC	300
TCAAAATCTG CACAAATAGG GGTGGTGGAA GGAGAGAAAG AAAACCCAT GCCAGAAATA	360
ACATGCTTAG CAGAGAGAGA GAGAGATCTC GAG	393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCTGGCC TTCATGGCCT AACTCAGTTG GCTTCTAATT TCGTAACAA GATTAAGGTA	60
GTATTTTGT ACTATTATTG GAAGCATGCC TTCCCTTTT CACATTATTA AATTGTATTT	120
ATATTTGTGC AATTTAAC TATGTTTCA AATAAACTTT GTCTGGGCT TCGAGGTCTT	180
TTCAGGAATC TTCAAAATG GGATTTGGGG ATCAGAACTC CTTCTGATCA AATGGAATCC	240
AATTGTACT ACTGGTCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

CAGAATGGGA	CTCCAAGCCT	GNCTCTTAGG	GCTCTTGCC	CTCATCCTCT	CTGGCAAATG	60
CAGTTACAGC	CCGGAGCCG	ACCAGCGGAG	GACGCTGCC	CCAGGCTGGG	TGTCCCTGGG	120
CCGTGGGAC	CCTGAGGAAG	AGCTGAGTCT	CACCTTGCC	CTGAGACAGC	AGAATGTGGA	180
AAGACTCTCG	GAGCTGGTGC	AGGCTGTGTC	GGATCCCAGC	TCTCCTCAAT	ACGGAAAATA	240
CCTGACCCCTA	GAGAATGTGG	CTGATCTGGT	GAGGCCATCC	CCACTGACCC	TCCACACGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GAATTCCGCC	AAAGAGGCCT	AGTTAAAGA	AAAAAAAAAA	GACCCATCAA	GGGCATAGAA	60
AAGCTTAGGT	GAAGAAACCC	TAAAATGAAT	CCTCATTAT	CAACTCATTC	ATTATATTGAT	120
TCATTGTTTC	ATTCATTGTTG	TCACTCAAGA	AGTATTGTTG	GCCAGACACA	GTACCAACAA	180
AGAAAATAAG	CATCCACTAC	GGCTTTGCA	AGCTTGGTAC	GCAATGCTG	GTTCAGAGGA	240
GATATTGTT	CATCGCTTGC	TTTTAAGTGT	ATCACAGCT	AGGGTGGCAT	GCAGAGGTTT	300
GAATAAGTGC	TGAAACAGGA	CAAGTGAGGT	GCTTATGGAA	ACACACAGGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GAATTCCGCC	AAAGAGGCCT	AGAAGGAAAT	TGTCCCGAAT	CCCTGCAGTC	TTTCTGTAGG	60
TTGCGGCACA	ACGCCAGGCA	AAAGAAGAGG	AAGGAATTAA	ATCCTAATCG	GTGGAGGTG	120
ATTGAGGGT	CTGCTGTAGC	AGGTGGTCC	GCTTGAAGCG	AGGGAGGAAG	TTTCCCTCCGA	180
TCAGTAGAGA	TTGGAAAGAT	TGTTGGGAGT	GGCACACAC	TAGGAAAAAG	AAGAAGGGC	240
GAACTGCTTG	TCTTGAGGAG	GTCACCCCCC	AGAACATCAGCT	CTTGTGGCCT	TGAAGTGGCT	300
GAAGACGATC	ACCCCTCCACA	GGCTTGAGCC	CAGTCCCCACA	GCCTTCCCTCC	CCACGCTGA	360
GTGACTACTC	TATTCCTTGG	TCCCTGCTAT	TGTCGGGAC	GATTGCATGG	GCTACGCCAG	420
GAAAGTAGGC	TGGGTGACCG	CAGGCCTGGT	GATTGGGCT	GGCGCCTGCT	ATTGCATTTA	480
TAGACTGACT	AGGGGGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GAATTCTGGCC	AAAGAGGCCT	AATCAAATAG	TAAAGGCTGT	TCTGGCTTT	TATCTTCTTA	60
GCTCATCTTA	AATAAGTAGT	ACACTTGGAT	GCAGTGCCTC	TGAAGTGCTA	ATCAGTTGTA	120
ACAATAGCAC	AAATCGAACT	TAGGATTGAT	TTCTTCTCTT	CTGTGTTCG	ATTTTGATC	180
AATTCTTAA	TTTTGGAAAC	CTATAATACA	GTTCCTCTATT	CTTGGAGATA	AAAATTAAT	240
GGATCACTGA	TATTTTACTGTC	ATTCTGCTTC	TCATCTAAAT	ATTTCCATAT	TCTGTATTAG	300
GAGAAAATTA	CCCTCCCAGC	ACCAGCCCCC	CTCTCAAACC	CCCAACCCAA	AACCAAGCAT	360
TTTGGAAATGA	GTCTCCCTTA	GTTCAGAGT	GTGGATTGTA	TAACCCATAT	ACTCTTCGAT	420
GTACTGTTT	GGTTGGTAT	TAATTTGACT	GTGCACGATC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GAATTCTGGCC	TTCATGGCCT	AGGATTCGT	ATGCAAGCTC	TTGTTTCTCA	GGCTGCCTGC	60
AGAAGAAGTC	GCTATAAATT	ATCTGTTGTC	TACATGGTAC	AAGGCCATT	GACTCATCTG	120
ATGCTTGTTC	TGTTAATTTC	TTAATATTTC	TTATCACGGG	GCAGTGGGAG	GGCTTGGGCT	180
TTTACCCACA	GCTGTTTAA	GACTTCTGAT	CTCCTGCCCT	GCAGGAATAG	GTCGCAACTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

CTCCACCGAG	AGCCTGGACA	GTATGAAGGC	TCTGACAGCC	GCCATCGAAG	CTGCAAACGC	60
CCAGATCCAT	GGCCCTGGCCA	GTCAACACAT	GGCAATAAC	ACTGCCACCG	TCACCAACAC	120
GACTACCATA	GCCACCGTCA	CCACGGAGGA	CAGGAAGAAG	GACCACTTTA	AGAAAATCG	180
ATGCCCTGTCT	ATCGGGATAC	AGGTGGATGA	TGCTGAAGAA	CCTGACAAAA	CAGGGAGAGA	240
TAAAGCACCC	AGTAAGTTCC	AGTCCGTGGG	AGTGCAAGTA	GAAGAAGAGA	AGTGCTTCCG	300
CAGGTTCACT	CGATCCAACA	GTGTGACGAC	AGCAGTACAG	GCCGACCTGG	ACTTCCATGA	360
TAATCTGGAA	AATTCCTCTGG	AATCTATAGA	GGACAATTG	TGTCCTGGCC	CCATGGCCAG	420
ACAGTTCTCC	CGCGATCTCG	AG				442

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCCGGCC TTCATGGCCT AGATGATCAG GTTTTCTGG ATGAAATGA GGTGTATGTA	60
TGGATCTATG ACCCAGTCA CTTTAAAACA TTTGTATGG GATTAATTCT TGTGATTGCA	120
CTAATAGCGG CCACCCCTCTT CCCCTTGG CCAGCAGAAA TGAGAGTAGG TCTTTATTAC	180
CTCAGTGTGG GTGCAGGCTG TTTGTAGCC AGTATTCTTC TCCTTGCTGT TGCTCGATGC	240
ATTCTATTTTC TCATCATTTG GCTCATAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCCGGCC TTCATGGCCT ACTTTTCCAG AAACCAAGAG TGGCTCTACT GTGGCTATAT	60
TATTATTGTT ATTATTATTA TTTGGAGAT GGGGCTCAC TTTGTATCC AGGCTGGAGA	120
GCAGTGGCAC CATCATAGCT CACTACAGCC CCAAATGCT GTGCTCAAGG GATCCTCCTG	180
TCTCAGGCCCT CTCGAG	196

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCCGGCC TTCATGGCCT AATCATTTAT ATAAAGTTA AAAACATTTG AGAACTGAAC	60
TATATATTT TAGAAATATC TGCAATATGCC ACATAAATT TTAAATCAT AAGAATGCTA	120
AACAGCACAT TCAGGACAGG GTGAAGAAC AGGCATGCAG GTTGTGCACT AGGAAGCTGG	180
GTAACATTGT TCCTTATGCC TTTGTGTCG CTTCCAGAAT TTCAATTTAAA ACTTTTTAAA	240
AAACATGGGC CCACATTATG AATTACGCTC GCTTTAGAG TACTAAAAAC TCCAAGCAAA	300
AAACATGAG CCACCGGGCA CGCCCTGGCT TTATTTATT TTTCTACGTT ATTATCCTG	360
TTTCAGAGG AGGGAATTGT CAGGGAACTC TCGAG	395

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

GGAGAGCTCT	GGGCCAGCCC	TTCTCTCTCT	CTCTCTCTCT	CTCTCTCTCT	CTCTCTCTCT	60
CTCTCTCTCT	CTCTCTCTCT	CTCTCTCTCT	CTCTGTGTGT	GTATATATAT	ATATATANAC	120
TTTTCCTTC	TGGATGCAAT	AGAGCTATT	TTTTCTCTTT	GGAATTGAGT	GACACCACCA	180
AGATACTTT	TTGGGTTGAA	TATGTGTGTT	TTTCAAATT	CAGTCTGCC	TTTTTGTTG	240
TTGTTGTTG	TGTTTCTT	AGATGGAGTT	TCACTCTGT	TGCCCACTCT	GGAGTGCAAT	300
GGCCTATCT	CTACTCACTG	CTACCTCCGC	CTCCCAGGTT	CAAGCAATTC	TCCTGCCCTCA	360
GCCTCCAAG	TAGCTGGGAT	TATAGGCATG	TGCCACCATG	CCCAGGAGT	TTTTGTATTT	420
AGTCTCGAG						429

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

GAATTCGGCC	TTCATGGCCT	AGAGAACTGG	AGCCAGCTGT	CAACTGCC	CGCCCCACCC	60
AGGCCATTG	GCTCTGCTA	CCGGCATGCT	GCTCAGGGCT	CTGCCAAGG	ACAACGACGA	120
GCCCCCTGTG	TCCTCTCCTG	GGTCATCTTC	CATGACCCTG	AGGCAGCGAA	GACAAGCTCG	180
GCAGCTCCCT	GAGCTGCTTC	ACACCAACTA	CCTATGAGTC	TGAGGCCAGC	ATCCAGGCGC	240
TGCCAGACCC	CTGAGAGTCC	CTGGACCATG	ACGTAGCCTG	TGTGTGAAGG	GAGCAAGACA	300
GCCTGACAG	AAGCACAGAG	AACGCCACTG	GGATTCTAA	AGACCGAAG	GGAAAAAGCA	360
CAGAAGATGC	TGGCGCTGCA	TCTCCTCCAG	CACCGAGAGG	CCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

GAATTCGGCC	TTCATGGCCT	AAATTAATAT	CCTTATTTTT	GCAGATTAGG	AAACTAAGAC	60
GTACTGAGGC	TGGGTGCTG	GTTCAAGATC	ATATAGCTAA	CATTATTGGA	CATGCAAATC	120
AAGCCAGAT	TTGTGACTCT	GAGCTGATGT	TAATTCTGTC	ACAATATTGG	TTCTCAAGAT	180
AAATCTTCC	AGGTGAGGGG	GAAAGGGAAT	AAATATCTAG	AAGTCCCCIT	AAACAGAAAGT	240
AATTAATTG	TTTGCAGAAA	TTGGCAAAAT	TTGGGTTCC	CTTCTTAAAA	GTTCCTTCT	300
GTCACTTGG	AAAAAATTAA	AATATGTGCA	TTAGGTTGAC	AAAGATCAAA	AAAGTTAAAA	360
AAAAACCC	TTTGGATATG	TGTGGAGAAA	GTAGCACTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTT TATCCTTCA	60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AACCTAGCA TTTGGGAGG	120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCCT GGTGAAACCC	180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGCGT GCAGGTTCCCT GTAGTCCCAG	240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA	300
GAATTCATT AGGCCATGAA	320

(2) INFORMATION FOR SEQ ID NO:1029:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAACGCTG TAGTTGAGGG TTGTTAGAAA	60
CCTGCATTTT ATAAAAATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA	120
TCAACTAGTT TTCATAAAAGA AAAACCTCTGG AGGGCCCATATA GTGCCCTGCAC TCCAGGTCTC	180
AAAGTATACT TTGAGATCTA GGTTATCTGC CAAGGTGCTA TCCTGAAAGG ACTCTAAATG	240
AGACAACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:1030:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 280 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT	60
TTGTTTTAA ATGATTCTT GTAATAGACT ATTGGGTCAG CTAATACCTT TTTGCATCTT	120
CATATTTAT GTCATGTTAA TGATAAATTT TCTGACTTGT ATTGATGATGT TTTGCCCTT	180
TATCCCTTAA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC	240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1031:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTTAAAT ATCTTCGAGC TGAACCTGAG	60
GACCATTATT TTTAAATGAC AGAACCTCCA CTCAAATACAC CAGAAAACAG AGAGTATCTT	120
GCAGAAATTA TGTTTGAATC ATTAAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG	180

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAAGTGGGT AACGTACGTT AACGGGGATA	240
GTCATTGACA CGCGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAAATAATT TAACTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACTTTAT	60
GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT	120
GAGACCACTG ATCATGTTTA GCTCAAATTG ATGTTGGATA GAGGTTATAG GATGGCCTT	180
ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA	240
TAATGTGTG ACTATCCTAT TCCCCAACAA ACTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCTGGCC TTCATGGCCT AGGTTACATG TATAAAATAA TCGTAGCTGT TAATCAAAC	60
GATCATTTCG TATTTGTTGT TTACATGTTT TTCAATTATT TGTTCAATTCA GCAAACACTT	120
AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTT TTTGGCTAGT	180
GGAAATGAA AACCACTGTG ACCTTGAA GCTCGGGAA ATGCTCATTT GTACAAATAT	240
CGAGGACCTG CGAGAGCAGA CCCATACCAAG GCACTATGAG CTTTACAGGC ATCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCTGGA AGACACTGAC TGACTGGAAG ACCTGGATT TTTCTGGAA GACACTGATT	60
GACTGGAAAG CCTGGATTTC TTTCTGGAAAG ACACGTGATTG ACTGGAAAGAT CTAGATTTTT	120
CTGGAAAGAAC TAGATTACT GGAAGACTTG GATTGGGG AAGACGTGAA TTTTCTGGAA	180
AGACACTGAC TGACTGGAAG ACCTGGATT TTTCTGGAA GACACTGATT GACTGGAAAGA	240
CCTGGATTTC TTTCTGGAAAG ACACGTGATTG ACTGGAAAGAT CTAGATTTT CTGGAAAGAAC	300
TAGATTTACT GGAAGACTTG GTAGGCCATG AAGGTCGAG	339

(2) INFORMATION FOR SEQ ID NO:1035:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

GAATTCTGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA	60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA	120
TTAAAGATGA AAGAGCAAAG GATGTCCTGCC CAGTGAGACT AGAAAAGCAGA GGGAAATGCG	180
AAGAGGCAGG GGAGTGCCTCC TACCAGGTAA GCCTGCCCTT CTTGACTATT CAGCTCCCGA	240
AGCAATTCAAG CAGAGATCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

GAATTCTGGCC AAAGAGGCCT AAAGCACCCG CTTCCTCACC ACCCCCCACTG TTGGGCCTAT	60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCCAGCAT	120
GGTCCCACTG AAGTCCTACT ACCGCCCTCCC CTCCCCAGCC TTTTCAGAA ACCATACTGG	180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTCT	240
CCACTGCCAC GTCACCCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

GAATTCTGGCC AAAGAGGCCT ACGGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC	60
AGCCCTCCCG TTCCCGCCG GTGGGCCCTG ACCACACTCC CTTTTCTAGA AGTCAATCCT	120
AAGGTTTCTC TGCTCTGCT AAGAGGATGT AAATTTGGAT TCTTAGAGGG CATGGCACCC	180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG	240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTGGCC TTCATGGCCT AGCTCTGCAA	GGAAGAGAGC TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG TCTCTCCAGC	TCTCAAGAG CTCTCGGGC	TCTCCTGCAG GAGACCAGG	120
CAATGCTCCT GTGCTTCCTG	GGGCCAGTAG CAGCACCCCTG	AGCTCCCTGC CACCAAGGCAG	180
CTGAAAGGCA TAGCGTGAGG	TGCTTCTCTC	AGTCCCATT ATGACAGTGG CCACCGGAGA	240
CCCAGCAGAC GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG GACGCCCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTGGCC TTCATGGCCT AACTCTACAG	CAGTGCTTAT TTTTACATTT	CCAAGCGAAT	60
ACCAAAACCT TCAGCAAAGA	TTGGGTTGGT	ATTAACGGGT	120
GTGGATCCCG GAGTTTCCCC	CAAATCCATC	TACATCAAAT	180
TTTCTTCCG CAGGCTCTTT	AGTTGAGTGC	CTGGAAAAG	240
TTAACAAACT GAATGTCACT	CTTCATAAGG	CCATTGGATA CCCCTTAAAAA	300
CACTCCCCAT TACCCGGACC	ACCCCTCATC	CAGATGCCGC CGTCAGACTC	360
CCCTTCTTC AATTGGGCCA	GTACGATCTC	TTCATGGAAA GAG	393

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTGGCC AAAGAGGCCT ACCCTACTGT	GACACACCTA	CCATGCCGAC ACTCTTCAAC	60
CTCCTCTGGC TTGCCCTGGC	CTGCAGCCCT	GTTCACACTA	120
AAAAAAGCCG CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	180
GACCGGGTTT TGTTGGTGAC	GGACCTCAA	GCTGAGAGTG	240
TACTGCTCGG CAAAGGCCCG	GGACAGACAC	TTTGCTGGG ATGTACTGGG	300
CCATGAAACA GCCATGGCTA	CGATGTCA	CTATGTCACT	360
TCACCCGTCT GGCTGCAGCT	GAAGAGACGT	GGCGTGTAGA	420
CACGACGTGG ACCAAGGGTG	GATGCGAGCT	TGTTTGAGGT	480
GTGCTCGGC TCCCTGTTGA	GGACTGGACT	CACGGGCCTC	540
GAGGATGAGA TAGAGGAGCT	TACGATGATT	ATGCCAAGGG	600
GAG		CTTGACACATA	603

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCCGCC TTCATGGCCT ATAGAAACAT CAGTGGGCAC ATTTACAACC AGAATGTATC	60
CCAGAAAGGAC TGCAACTGCC TGCACGTGGT GGAGGCCATG CCAGTGCCTG GCCATGACGT	120
GGAGGCCCTAC TGCGCTGCTGT CGGAGTGCAAG GTACGAGGAG CCCAGCACCA CCACCATCAA	180
GGTCATCATT GTCATCTACC TGTCCGTGGT GGGTGCCCCG TTGCTCTACA TGGCCTTCCT	240
GATGCTGGTG GACCCCTCTGA TCCGAAAGCC GGATGCACAC ACTGAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 331 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAAGC AGAAAAGAACT GGCAGAAACA GAACCCAAAT TCAACAGTGT GAAAGAGAAA	60
GAAGAACGAG GAATTGCTAG ATTGGCTCAA GCTACCCAGG AAAGAACGGA TCTTTATGCA	120
AAGCAGGGTC GAGGAAGCCA GTTTACATCA AAAGAAGAAA GGATAAGTG GATTAAGGAG	180
GAACTCAAGT CTTTAGATCA GGCTATTAAAT GACAAGAAAA GACAGATTGC TGCTATACAT	240
AAGGATTGGA AAGACACTGA AGCAAATAAA GAGAAAATC TGGAGCAGTA TAATAAACTG	300
GACCAGGATC TTAATGAAAGT CAAAGCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT TCCCAGGCTG ACATAGAGAC CGACCCAGGT ATCTCTGAAC CTGACGGTGC	60
AACTGCACAG ACATCAGCAG ATGGTTCCCA GGCTCAGAAT CTGGAGTCCC GGACAATAAT	120
TCGGGGCAAG AGGACCCGCA AGATTAATAA CTTGAATGTT GAAGAGAACCA GCAGTGGGA	180
TCAGAGGCGG GCCCCACTGG CTGCAGGGAC CTGGAGGTCT GCACCAAGTTC CAGTGACCAC	240
TCAGAACCCA CCTGACGCAC CCCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GTCATTGCAT CCAAGATAAT GAAATATCTA TAACCCAAA AGTTTCTGT GTCCCCTTGT	60
TATTCTTGC CCTGCCAGT ATTCAAGCAA CACGGATCTG TTTCTCTTT TAGTTAGTT	120
TGCATTTCT ATAAAGCTT ATGAATGAAA TAATAAAATG TGGACTATTT TCATGGCCG	180
GGGAGCAGTG TGCGCTTCTT CATTCAAAT GATTGTTTG AAATTCACTCC ACAGCGTTGC	240
ACGTATCAGT AGTAGATTCC ATTTGATTGT TGATTTGTAT TCTATTGTAT GCCTGAGTCA	300
AAATTATTC ATCTCTTGT CTGTTGATAG CCATTTGGGT TCTTCCAGTT TGGGCCATT	360
ACAAATAGAG GTACTATGAA CTTTCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

GAATTCCGCC TTCATGGCCT AATGTGAGCC ACCGCACCCA GCCGAATATT TGTACTTTGT	60
ATAAAATTCAAT TGCTCTTTT ACAGTTGAA TGGCTCTTT ACCCTGGCAT AATTTGTAAT	120
CGTGTGGAGC ATTGGAAAAA TTCTTATTGG ATTATGCAGA TATTTCAAT GCTGGTATT	180
CATTATATGA TAGAAAAAA TCACCTTTTG TTTTGTCTTG TTTTGTAT TTTTCTTTT	240
TTTTGAGGC AGAGTTTCGT GCTTGTGCC CAGCCGAAGG CGCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCCGCC TTCATGGCCT AGTAACCTCA TAACATTGCT GGTGTTGAGG TGAATCTTAG	60
TGGTCATCCA GTCCCAAGGC ATCCTTGCCA GCCCCCTACA ATACCTGGAT GGGCGCTTAT	120
CTTCAGGTAG GCCTGAGCCT TTCTGGTAAAG GAGGAGCTCA CTATTTCTAA AGGAAACCTG	180
TGCCATTGGG TTAAGAAAGT ATTAATTTTAAACATTGGT AGTTGTTAAG CAGTTGTTGA	240
ATATTTGAG CCAAAATTG TTACCTCCCA TACCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GAATTCCGCC TTCATGGCCT AGCAGCATT C	AAGGAATTAA TATTAGTCAC TGAGAACAAA	60
AAGCGAAATT AGAAAATTTC AAGTCACTTC TAGGCTTGT	GGGGAGAAGA CGTGAGTGA	120
TGAATTCTAT CATTATGAA GTACCACTG GATCCCACAC	ACTGTGCAAG ACCTTTAGAT	180
CAGGCCTCTC CCTCGGTTT CTTCACCTG TGCA	GAGGT GCTGTTATTT CCTTTTTAA	240
ATTATTATTT ATTATTATTA TTTTTTGAGA CAGGATCTCC	CTTTGTCACT CAGGCTGGAA	300
TGCA	GAGGCA TGATCACTGC TCACTGCAGC TTGACCAC	350

(2) INFORMATION FOR SEQ ID NO:1048:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

GAATTCCGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAAATTGG TTTTATTGTG	60
TCAACTAAA ACCATGAGTC TAAATCTATT AGTCATACCA AATTGTTCA TTTTATTTA	120
TTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG	180
CGATCCTCCC ACCTCAACCT CCCAAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA	240
GTTCTCAAAT TATTTATAC AATACAACA TTTAAATAT AAATCATGCA CTCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1049:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

GAATTCCGCC TTCATGGCCT AGAGCTTGG TGCTTTAC ATAAGGAAC TACTGGGCT	60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGA TAAGGAACT GAGGTTCAA	120
ACATGAGATG TAATAGCTTG CCCCAAATCT AGCCAGTGAG CAAGAGAGTA GACTTTGCC	180
TGTGCCAAA CAGTAATCAC CATCCACAAG TGGCTATTAA AATTAAATT ATTACAATTA	240
AATAAAGTTT AAAATCCAGT TCCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG	300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC	360
ACTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1050:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

GAATTCCGCC TTCATGGCCT ACAATTTAA AATTAAAATT TTTCTATTT TTTGCAATT	60
ATCAACCTAA CACATTGAAG AAACCTGGGA AATATAGAAA AAACACACCA AAAAGTATCA	120

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTT TTTCTGTGTC	180
TGCTCTGCTGT CTATGTCCAT GCCTACCTA CTTTCTTCCC TCTCTCTTCC CTCCCCACCC	240
TCCCTTCCCTT CCTTCCCTCC TTCCCACCTT CCCTGCTTC TTCTTGCTG CCTCCCTTCC	300
TGCCCTGCCTC CCTTCCTGCC ACTTACATTG TGTTAACAAAT GAGAAAAAAA TTCCCCCATC	360
ACTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1051:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 340 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

GAATTCCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAAGC TGACTCACGC	60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTCAGCAA	120
GCAGATGGTG GAAATCCCTC ACAAAACACAA TATTCACTTC AGCAGCTTTG ATATCTTCTC	180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GTACTCTAAAT TGGCCCACCT ATCCTCAGCT	240
CTATGTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA	300
AGAGCTGGAC ACGATCTGTC CCAAAGCACC CAATCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:1052:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 444 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

GAATTCCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCCAGGAC AAGACCCTGA	60
CTCACCCCCAG CATGAAACT ACCAGGGAGG GAGGGTCCCC CATCTACTA TGACAACAG	120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG	180
TTCCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT	240
GTTCGCGAGG TGAAGGGCTT TGTCGGGAG AATGTCTGG CCTACTATGTT CTCTATGCT	300
GTCTCTTCA TCTCTCTCAT CGTCCCTCAGC TGTTGTGGGG ACTTCGGCG AAAGCACCCC	360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCTGT CGTACATGT GGGGATGATC	420
GCCAGCTTCA ACAACACACT CGAG	444

(2) INFORMATION FOR SEQ ID NO:1053:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

GAATTCCGGCC AAAGAGGCCT AGATATTGCA TTCCATTGGA GCTGGTATTG TTAAGGTCTC	60
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GTGACGTCAG TGACCTCATT TTACTTGATC TATTAGCAGC ATTCATACA GTTGGTGACT	120
CTTCTCCATT AAAACATTAA CTTTATTTGG CTTCTAGGAA ACATATTTTC CTGCTTTTC	180
TTCCCTATTC TCIGACTCTT TTCTCAGTTT CCTTTGCTGT TTCCCTTCT ATCCTCTAAA	240
CATTGAAATA TCCTAAGCCT AGTTTGGGAT TCCCTTGATG GTCTTCATTT CTTFAATGGG	300
AACTGTGCTG GTGACTCAAA TTTATATCTC CAGCCAGAAC CTTCTCCTG AATTCCAG	358

(2) INFORMATION FOR SEQ ID NO:1054:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

CCTTCATGGC CTACTTCTGG TATTACATCA CACTGATCAT GCTGCTGGT GCCGTGCTGG	60
CCGGAGCTCT CCAGCTGACG CAGAGCAGGG TTCTGTGCTG TCTTCCATGC AAAGTGGAAAT	120
TTGACAATCA CTGTGCCGTG CCTTGGGACA TCCCTGAAAGC CAGCATGAAC ACATCCTCTA	180
ATCCCTGGAC ACCGCTTCGG CTCCCCCTCC GAATTCAAGA TGACCTCCAC CGACACGAGT	240
ACTCCTATAT TGATGCCGTC TGTTACGAGA AACAGCTCCA TTGGTTGCA AAGTTTTCC	300
CCTATCTGGT GCTCTTGAC ACGCTCATCT TTGCAGCCTG CAGCAACTT TGGCTTCACT	360
ACCCCACTGAC CAGTTCCAGG CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:1055:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

CGATTGAATT CTAGACCTGC CTGTGCTCCT CGATGGTGT CTCCTCCCA GAAAACGCAT	60
GCTTATTGAC CTTGGTTTG ATCTGCTTGG CGGTGTCGCT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1056:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 650 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

GAATTCGGCC AAAGAGGCCT ACACAAGGCT AAGGGTATTG GATATAACGG AAAGTGGAAAG	60
CTATACCTGA CTTCAGAGA ATGTGGACCG GATATAAGAT CTTAATCTTC TCTTATCTTA	120
CTACAGAAAT CTGGATGGAG AAGCAGTATT TATCTCAAAG AGAAAGTGGAC CTAGAGGCTT	180
ATTTCACTAG GAATCACACC GTTTGCAAG GTACTCGATT CAAAAGAGCC ATTTTCCAAG	240
GGCAATACTG TAGAAATTTC GGCTGTTGTG AAGACAGAGA TGATGGCTGT GTCACTGAGT	300
TCTATCGGGC GAATGCGTTG TGCTACTGTG ATAAATTCTG TGACAGAGAA AATTCTGATT	360

GCTGTCCTGA CTACAAGTCC TTTGCCGTG AAGAGAAAAGA ATGGCCCTCCT CACACACAGC	420
CTTGGTATCC AGAAGGTTGC TTCAAAGATG GTCAACATTA TGAAGAGGGGA TCAGTAATTAA	480
AAGAAAAGTG CAACTCTGC ACATGCTAG GACAGCAATG GAAATGTTCC CAGCATGTAT	540
GCCTGTTCG TCCAGAATTA ATTGAACAGG TCAATAAAGG AGACTATGGA TGGACAGCAC	600
AGAATTACAG CCAATTTGG GGAATGACTT TAGAAGATGG ACTCCTCGAG	650

(2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 378 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC AAAGAGGCCCT ACACGTATTG GCCAGGATGG TCTTGATCTC CTGACCTCAT	60
GATCCGCCGG CCTTGGCCTC CCAAAGTGC AGGATTACAG GCGTGAGCCA TCGCGCCAG	120
CTGAGAATAG TTTAAGAAT TGGTTGAGAG GCAGTTGCTT TTTCTTGAA TATCTAGAAC	180
TGTTCTGGAC TAACCTCAAA GAAACACAT GGCAACATTA AAGGAAAGAT TATTGAGAG	240
GCAGGGGATA GTATGGCTTA GGACTTGGGC TGCTACCTT GACTTTGTAATTC AAAAGAT	300
TGTAATGTTTC CATATTTCATCTGATCAT TAAAAATATC TGTGTACAT GCAAAAAAAAAA	360
ACCTATAGGC AACTCGAG	378

(2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTCATGGCCCT AATTTTAACA TTTACATAGA CAATTCAATT GGTGTTTGT	60
CTCTCTAGTTA TTGGCCCAA TCTCTGATGA TTTCCACTCT GTCTTGCCCA CTCACTCCGT	120
TTGTCATATC TTGGCCATTA TCATCACCTC AAATTGCTCC ATCTTCAAAA TACTTGCATC	180
TTTATTATTC ACCATATTCC TTCCACATTGG TTTATTGAAC TATTCCTCT ATCATTCTCT	240
GATTCACCTG CAGCCATG	259

(2) INFORMATION FOR SEQ ID NO:1059:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAAAAAAACT ACTAACCACT GCAAGCTCTT GTCAAATTT AGTTAATTG GCATTGTTG	60
TTTTTGAAA CTGAAATTAC ATGAGTTCA TTTTTCTTT GAATTATAG GGTTAGATT	120
TCTGAAAGCA GCATGAATAT ATCACCTAAC ATCCTGACAA TAAATTCCAT CCCTTGT	180

TTTTGTTTGT TTGTTTTTC TTTCCCTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 103 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCTGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTC TGTTTCATAT	60
GGTAACAACT CTCATGTTGA ACATTTGAG GAGCCCTCTC GAG	103

(2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 361 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCTGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTCTC	60
CAAAGAACAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTTGTGTG	120
CCCTTTAGAC AGGCTGGCCT GCCGGTTCAG CAGGGTACAG TTAGGACTTG AGTCTTTCTT	180
TTCTCTGTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCTTCAGG ATGACCCCTT	240
GGAACATGTGC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCCTGTGA	300
GGGCCAGCTC TGGAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCTGGCC TTCATGGCCT AAGAAAAATT GGGAAACAAGC TAAGTCCCCA CATAAGTTACA	60
AAAATTACGT TAAATAGATA CACGGTTGCT TTTAAGCTCC ACATACAGCA CCATAGAGCT	120
TTTATATATAT TTGTTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACTTGACC	180
CAGGGTGTCT CTCTGGGGAG TGGAGCCACA TGGGATTCTA CTGTTCTGT ATTCTTATTA	240
CTTATATCAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

GAATTGGCC TTCATGGCCT ACCGTTGTTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA	60
GCCAAGCCC GTCCCTTCCTG TTTCCTTTCT CAGGAATGT GACCACGTGC ACTGGGAAGC	120
TTTGTTGAAA GTAGATAGGG GTATGAGCCA ATTGCCAGC ATTGGTGTGTT TGTTTTTGT	180
TTGTTTGTGTT GTTTTCACAG AGTCTTGCCG TGTCACCCAG GCTGGAATGC AATGGCGTGA	240
TCTCAGCTTA CTGCAACCTC TGCCTCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT	300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

CGAGTGTAC ATTGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAG AGTGGTCGCA	60
GACAAGTTT CTGAAAGATT AGAGAAGAAAT CCCCAAGAA TCAATTACAA CCAAAATGGA	120
AAGGGACAAC CTCGAG	136

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

GAATTGGCC TTCATGGCCT AGAATAAAGG AAAATTCAAGG TCATAGATTG AGTGCTATAT	60
TTGAAGTAAA TACAGACCTT CAAAAAAATA TAATATCAA AATCACTGCT GAGCTCTCCT	120
GGCCTTCCAT ACTTAGCTCA CCCCGCACT TGAAATTCTC ACTTACTAAT ACAAACTGCT	180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGCTAT GTTCAGTTA	240
TTCCCTCTGGC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

GAATTGGCC	TTCATGGCCT	ACAACCTGCT	TTCCACCTTC	TGTAATCTCC	CATCA	GAT	60
AAATTACCCA	TCAGCTTCC	AGATTCCAGA	ATTTGCTGA	CATCTCCGT	TGGCT	ATGTT	120
CTTATTCCCT	TTCTGTTTA	CTTGTGAC	CTTGTGCCCT	TTAATTCTT	CCCATAA	TTT	180
GTTGGACTT	CAGAAGGAAG	TGGAGCTAA	GGCATGTGC	TGCC	CTGCC	CC	240
GAAGTGGGA	AGGCCTTCCT	TCCAAGGCAC	CCAGCATAGC	ACCTGGCACA	TGATGGATGC	300	
TCAGCAAATG	TCTGTGGGTC	TCCTTTTAC	TAAACAGGCA	GTTGATTCA	CCAGAAGTAG	360	
TGACCACCTA	AGTCTCGAG						379

(2) INFORMATION FOR SEQ ID NO:1067:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

GAATTGGCC	TTCATGGCCT	AACACAGCTC	ACATCAGAAC	ATAATAGTGG	AACTAGGGTG	60
ACTTCACTCC	CTTCACCTG	ATGTCTATCT	TGGCCTTTA	GCACCTTGAC	TATCCCTGAA	120
AAGACTGGGT	CTTGTGTTTC	CCAGGGAAAA	AACGAAGTGA	TGTAGATCTA	AGAAATAGTG	180
CCTCTTAAAT	ATTAATTCT	TACATGACAA	CTAACACACA	GGGAAAAGGC	TATGTTAAGT	240
TGATTATAGC	TCCTCTTAAA	ATGTCCTATG	CTGTCAGTTG	GTCTTAGAGA	CATGGAAATA	300
ACCAAGCAAT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1068:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

GCGATTGAAT	TCTAGACCTC	ACCTCTGATC	TATCTCTTT	ACCTCAGCAA	TTTATTTCCC	60
AATTATTATA	TCTACTTTAT	TGTTCTTATG	AGACAATAGA	CTATGATAAT	TTTCCAGAAA	120
TAATTTGTT	TTCTTCCTCC	CATCTTCTAA	TGTTGAGACC	GTTTCTCTGT	TTTCTTCAT	180
CTCTACCCCT	CAGTCTCATA	GTTTTATTTC	TCATTTCAA	TCCAGCGATT	TCAAAACCTG	240
TACAAACAAAC	CAACTCAGCA	GCCCTGGCA	ACTTGAGGAG	ATTTCACAAA	CCACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1069:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

GAATTGGGCC TTCATGGCCT ACCATTTCCA CAACCATTAA AATCTGGCAGA TCGGTCCAG	60
ACGTAGGAT TCCTCGTCTC ATCTTGAAA CATTGCCAGC AGTGGTCTG ATTTGGAAAGC	120
CTCGCTCTGT CACCTGACAC CGCTCTGAGCC TGTGCCTGCC TCTCTTCTT CCGGCAGTGC	180
CCTGTACTCT GTGGGGATGA CGGCAGTGGG CCTGGCCATC CTGTGGTATG TTTCCGTCT	240
GGCCGGGAGA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1070:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

GAATTGGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTTGGATTT TGGTGTGTGC	60
TCTAGACAGA TACAGAATAAA ATACCTGCGC CTTGAGAACAA GGAAGTCCAC GATTCA	120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCCGGGCAG	180
CCCCCTCCCTCC CTGCTGACCT CAACAAGGGC TGTGCTATTG TTTTTTATTT TATTATTTTA	240
TTTCTCTTTA TTATTATTTAA TATTATTATT ATTTCGTTT GCTGTGGTCA CTATCATTGG	300
CAAAGTTCTT TTCCCTCGA G	321

(2) INFORMATION FOR SEQ ID NO:1071:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

GAATTGGGCC TTCATGGCCT AGGGAGGTAT TTGTCATTGT GAAAAGCTGG GAATCTAAA	60
CATAGTCAAC TAACTAAAAA AGAAGCTAAAC ACAGGTTGAG CATTCTAAAT CCAAAATCC	120
AGAATCCAAA TTGCTCCAAA ATCTGAAACT TTCTGAATGC TGACCTGATA CTACAAGTAG	180
AAAATCCAC ATACAAGTAC TTAACACAAA CTTTGTTCAGA TGACACAAACT ACTAAAAATA	240
TTGTATAAAA TTAACCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:1072:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

GAATTGGGCC TTCATGGCCT ACTTGGGCTC ATTTTATTG GTGAATTGAGA TCCGGCTGT	60
GGTGGCCATG GCCTATGAGG AGCAGAAATCA GGCCACCTTG GAAGAAGCAG AACAAAAAGA	120
GGCCGAATTTC CAGCAGATGC TCGAACAGCT TAAAAAGCAA CAGGAAGAAG CTCAGGCAGT	180
TGCGGCAGCA TCAGCTGCTT CAAGAGATTG CAGTGGATA GGTGGGTTAG GAGAGCTGTT	240

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT	60
TTATAAAGTTG TCTPAAGGGC CATCAAGGTAG AGTTGGCCTT TTCTGTGAG GTCCCCCTAAA	120
TTTCAGTGGA GGTCTCTCT TTGGGGCCAG TTTCTCTAGA AAACCTGGTC CTGATAGTAG	180
GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT	240
ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCCCA AATCCTCCCTC TGGCTGCTGA	300
CCCTCAGGTT CAGTTTTCC TGTCAGTGGA GGTTGAGGGT GGGGGTAGG CTGGCTGTGG	360
AGAGTAGGGG AGAGGACCTG GGTTCCAGTA GCTCGAG	397

(2) INFORMATION FOR SEQ ID NO:1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACGTG ATCCCTACGC CTGAGGAAT GACAAGATTG	60
AGAACGATGA ACAGACAACT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC	120
CTTCATCTA GAGGAAACTT TGATCCTAAAG GCCATGAATA ATTTTATGA CAACATAGAA	180
CCTGGCCAG TTGTACCAACC CAAGCCATCT AAAAAGACT CCTCAGACCC CTGCACAATT	240
GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC	300
CATCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTGGCC TTCATGGCCT AGAAAACCTAA ACATTTGCCCT TTTATAAAGA CTGACAAAAT	60
ATAAACTTT ATTCTAACCC TATCCCCAA ACTAGCCAGG CCACACCCCA GATGTTCTTA	120
TTGACTATTG GGAAGATAGA AAAGGCAGTTG TGTTTTGTG TTTTTGTTG TTGTTGTCTAT	180
TGTTGTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCA ACCACGACTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA	60
AGCAACTATG CACATTCCAG ACATAAAAGAT CATTAATAAA CGCCTTAATC TAAGGATCTG	120
TTGGTTCTAA CGCCAGAAAA AGAAGTAAA TTTTAAAAAA TATCTAAAAG AGATTTAAG	180
TGGGCAAGCA ATAGAGAAGA TACCCAACAC TGAGAAACGG AAAGGAAAAA AGACCAACCT	240
AATAACATACT GCTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AAGAAATGAG	300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTCAAGGGAA	360
CCTAGGGTTC AGACACCCAG AGTTTTATAT AAGGATAATT TGTCTGAAT CAAGACACCA	420
CTGTCCTCTC CTAAACCTA ACTGCTACAA GCAGACACCA CCTCTCTGA CTGGGCTGAA	480
GTGTGGGAAA CAGTCAAAA ATTAGGTATC ACACCATAAA CCCTCCACAA GAGCAACCTT	540
TGCTCTCAAT TAAGTTGTTG ACAAAATAAT TCTCAACTTG CCTAGGCCTG CGAATTTC	598

(2) INFORMATION FOR SEQ ID NO:1077:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAAA ATTGAACTCA	60
CATTGTTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAG	120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTTAAAAAGA AGATCATTTG CTTTCATTC	180
AAGCTCTAAC AAAATCCTAC TGATATCTCT TCTTTCCAGC ATGGGTGTAT GTGAGGCTTA	240
CTTCCTGGCAT TGACCAAAAT CAGCTGCCCG CAGCCATCAT ACCCACAGGA GTATTCTAC	300
TCCCCAATGC CGTAGCCTTC ATGATTGAGG AATTGCTGT CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1078:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

GAATTCGGCC AAAGAGCCTA GCTCCTGTTA CCATTATTAT TATTCATACT CATATTCTT	60
ACTTCTAACT TCAAGTGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT	120
TATTCTCCTT GATGACTATT TCATACCCTT CCCTCTTCC CCAAACCTCC AACACCTCCT	180
CTTCCCACATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGACT AGAGAAGCAA	240
TTTGATGGGA ATTCCACAA GCTCCATCAC ATGTGGCCAC TCATCTACAT CTGGATCCAT	300

CTATTGGCC TTCCCTATTG TCCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360
 CATCTCCACT CCACATTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCCGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTTT TTTTTTTTC 60
 GAGACAGGGT CTTCTTTGT CACCAACAGGC TGCACTGAG TGTTGTGATC ATAGCTCACT 120
 GCAGCCCTCA ACTCCAGGCC TCAAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180
 TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTTAGAG ATGAGGTCTT 240
 GCTTGTGCG CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 208 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCCGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGGG CTTTGCTGT 60
 TGGATAGAAT TAAATTGTC TACATAATAA TTGTTTTAG GACCCTTAA TTTTATCTGA 120
 ATACACAGAT TAGGCTTTAA AAACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTGGC 180
 TAAGTTAGCT TTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 425 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCCGCC TTCATGACTC CTGATTCAAGG GGTCAGTTA CTTCATAAAA AATCATTAGA 60
 AAAGGAAGAA TTATGCCAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAAACTGC 120
 ATCTAACGTC TCAGAAATGG ATTCTTTAA CAATCAACTA AAGGAACCTA GAGAACCTA 180
 CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240
 AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300
 GAAAGCAAAG CAAGGAAAG AAAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360
 AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAA ATTCCAAGAA GAGGAACGTC 420
 TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1082:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCTGGCC	TTCATGGCCT	AAGACTTCTT	GCAGGAAAAA	TGAGTGCATT	GAGGATAGTA	60
ACCTGACTTT	CTGACCTGTG	ATTAATTAT	GATAGTACTG	AGTCATTTA	CTCTCCCAGG	120
GTGAGGAA	GTGCCCGGTG	AGGACTTGGA	GCCTAGTGTG	GAGTTAGTAG	AGCTGCCAG	180
GGTGGAGGAG	GCCACAGAGG	ACAGCCCTGG	TGAAGAGAAC	AGTGAGGCCT	TGGATGTGTT	240
GATATCCAGC	AAGGACCTGG	CACTGTCTAG	TGAGGACGAG	GCCTGCACAG	GATCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1083:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 444 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCTGGCC	TTCATGGCCT	AAGTCACTTG	TGTAACGTAG	TTATACTTTG	CTGCATTNTA	60
ATTAACCTTC	AAACAGCTATT	AAAGTGGAAAT	GTAAGTAAA	TTTTGAAGGA	AAGGAAATAA	120
ATGTTTCCA	TATTTCTGCT	TGATTTACTT	TCTGTATGAG	AACAGCTGTG	TTTTGATAG	180
GTTTATGGTT	TGCATGAGTT	CATATTTAAA	GTGATCCAGG	CCAATGCATG	GCTATTGCTG	240
TAAATCTTGA	TGTTTATTTC	TGCTTGTAA	AGTTCTATCA	CGGCCTACCT	GGAATTAAA	300
ATTCACTGAGA	CAAATTAATT	GGTCTCTG	ACAACCTTTT	TAATAAGTAG	ATTATTTAC	360
AAAGAAATTT	GAACAAATT	AAATGAATCT	TTGTTTAGC	TTGCCTCAA	GAACCTTCT	420
TAATAAAGCT	CCCAAACACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1084:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAGTGAGACT	CCCTCTCAA	GGAAAAAAA	AAGTTTCTA	GGATCAAAT	AGGAAACAG	60
TTGTTTCAGA	ACTCATGATA	TGAGTCATGA	CTACAACCCA	CCATATTCA	TAAAACCTCA	120
CCTTGTCTG	TTGCTGACA	TTAAGTGTTC	TACGAGATCC	ATACCTGTGA	AATCAGCTCC	180
TCTGGAATGA	CAGATGCTGG	AATAACTGGC	TGGGGCTGAC	TGCCCAAAG	CCCAGACCCCT	240
CGATCCCGTC	CTGTCCGAAT	AACTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

GAATTCTGGCC TTCATGGCCT ACTTTAACGT AACAAACANCA ACAAAAAAGT TAAGGGTAAG	60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGAC AGTATGTCAT GTCCTATAC	120
CTGGTGCCAT TGATAAGTT ATTCAATTCAA CAATATTTCAC TGATCACTGG CATATGCCAA	180
GCACACTGCC AAGTACTAGG GATATAAACAA TTAGAAAGAC AAGTTCCCTCC CTTTCAGTC	240
ACGATCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

GAATTCTGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA	60
AAAGCTCTAA AAATAGCAAA TCAGTGCATG GACCCCTCTC TACAAGTGCA GCTTTTTATA	120
GAAATTCTGA ACAGATATAT CTATTTTTAT GAAAAGGAAA ATGATGCGGT AACAAATTCA	180
GTTTAAACC AGCTTATCCA AAAGATTGCA GAAGACCTCC CGAATCTGA ATCCAGTGAA	240
GAAACAGAGC AACTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

GAATTCTGGCC TTCATGGCCT AATTTAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT	60
AGAGAAAGACT CATTCTTAGA TGACTATACA ATCCATGGGG GTCTTTAGGA TATTTAACTG	120
ATTTGGGAGA GGTGGATAAA AGAAAAAGGA GCATTAACCT TGACTATGCC TTTAGCTCCA	180
GCCGCTCTT TAAGAGGAAA TTGTTGGGCA GGTGGGGAA GGCTAGTCAT GGAACGAAAC	240
TGTAAGCCAG ATCGGGTGTG AGGGAGGGAG GTGATAAAAG GATTATAGGG TGGGAGAGCA	300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG	360
GAGAGGTCT GTAGAAAAGG AGGATCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:1088:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAATTCTGGCC TTCATGGCCT AGCCTTCNAA GTTTGAATGG CCCTTAGGTT TTAAGTTATC	60
TATGCAAAGA TGAAAAGGC CTTCACATTC TCAAAGGTGA CAACTCATAC CCAGCCATT	120
GCTTATTTT GCCTGCAGAC CTCCAATGGA AGTCCGGCA CATGGCGGAG AGCCTCACCA	180
ACATGCCAGC GCACCTCCCTC TACATCATCA TTGGAGCCCT CTGGCTGGCC TTCATCCTTA	240
CCAGGCCAGC CTATGAGGAG TTCTACAAC GCGCAGCAT CGACAGCGAG TTCAGCAATG	300
CACTCGAG	360
	368

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCTGGCC TTATGGCCTA CTAATACTTG TATTAATCA CTTCTAAATG	60
CTTATTATAC CCTGTATTAT AGTATTATAT TCTGAGTCTT AAAGGTGCTT AATGTGAAGA	120
TTCTCTCTCT ACATATTCAA CTCTTACTAA CTTTTGGCTT TAGGTAGAAA TCAGTTAGTG	180
TATTATATGAA TAAAATAGGA AACTATTTCCT CTAGGGGTAT AGGTATTCAG TAGGGAGCTT	240
TGGAGTCTCA ATGAGCTTCT TAAGAGAGCA TTTTTAATGG TAGGTTTAG GGAGAGTTTT	300
TGTAGTAAGA TAAAGTAGAT GAGAAAGTGT TGCCTCTAAA CAATCAACAA GCTGGAAATG	360
GGGTGCAAGAA TGAGGAGAAC CCTAACGAAT AGGCAATAAG AAGCTCGAG	409

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GAATTCTGGCC TTGGCCTAGT GAGAGAGCGT CAAAAAAACT TCCATCTCAG CCAACCACTG	60
ATACTAGTAC TGACAAAGAA AGAACTTCAG AGGACATGGC TGATAAAGAA AAATCTACAG	120
CTGACTCTGC AGGTGAAGGA CTGAAACAG CCCCAAAGTC TGAAGAGTTC AGCGACCTCC	180
CCTGTCCAGT CGAAGAAATT AAAATTACA CAAAAGAGCA TAATAATTAA ATTCTGCTAA	240
ATAAGGATGT TCAACAGGAA AGCACTGAGC AAAAAAATAA ATCAACAGAC AAAGGTGAAA	300
AGAAGCCAGA CAGCAATGAG AAAGGAGAAA GAAAGAAAGA AAAGAAGGAA AAGCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCTGGCC TTCAATGGCCT ACATGTTCAT TCTAAGAAAC TTAACCTCCAT	TTTTAAGCTT	60
TAAGATTCCC CCGATCCCAA ATAACCTAAC ACACCAAAG CCTTGCCATT TCACACATGC		120
TGTTCCCTTG CTTAGAACCT TTCAATGTC TAGCTCACTC TGTTTGGAC TTCTTTTC		180
TTTTCTTTT TTGAGACAG GGTCTGGCTC TGTCATCCAG GCTGGAGTGC AATGGGGAA		240
TTTCGGCTCA CTGCAACCTC CGCCCTTCCA GGCTCAAGCG		280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 443 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAAATTGA GAAAACCATG AAAGAAAAAG AAGAACTGTT AAAGTTAATT GCCGTTCTGG	60
AAAAAGAAC AGCACAACTT CGAGAACAAAG TTGGGAGAAT GGAAAGAGAA CTTAACCATG	120
AGAAAGAAC AGATGACCAA CTGCAAGCAG AACAAAAGGG TCTTACTGAA GTAACACAAA	180
GCTTAAAAT GAAAATGAA GAGTTAAGA AGAGGTTCAAG TGATGCTACA TCCAAAGCCC	240
ATCAGCTTGA GGAAGATATT GTGTCAGTAA CACATAAGC AATTGAAAAA GAAACCGAAT	300
TAGACAGTTT AAAGGACAAA CTCAAGAAGG CACAACATGA AAGAGAACAA CTTGAATGTC	360
AGTTGAAGAC AGAGAAGGAT GAAAAGGAAC TTTATAAGGT ACATTTGAAG AATACAGAAA	420
TAGAAAATAC CAAGCTTCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCTGGCC TTCAATGGCCT ACCTCCATTG TATATTAACA TTTATCATAA TTATTATTTG	60
CTCATTCAAA AAATATTGCT CTGATATGGT ATTGAATATT CCTCACATAG GAAAATATGA	120
ACAGTTTATT TGCCACCCAG ATGTTTGGA AGCCTATACC CTCCAAGACA TTGAGAAAAG	180
AAAAATCTTT CTCTCAGGGAG AGAGAATGAG TGCCAAGCAA TGGGAGAAGC CCCTAAAAAA	240
ACCATCAGAT CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 454 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

GAATTCCGGCC	TTCATGGCCT	AAGCTGTTAG	TGATTCTGAC	ACCCTTGGAC	CTCCAGGAGT	60
AGCTCCTCCT	GCCACGAGAG	GACTCTGGCT	TTTCTAATAA	GGAAGTTCT	GGCCAATCAG	120
TCCAAGAAAG	GCCCGGATTCT	TCTTCCAAGG	TGTTGTCTCT	GCAGAAAATGT	TCCTCAGGGT	180
GGAAGGTGCT	GCTGCAGCAA	GGGATGTCCC	CTGAGTTTTC	AGGTATGTAG	TCTGTGGCTG	240
CAGCAGGTGA	ACACTCTCA	CACTCCCATT	TCTTACTGTGTT	AGATCTAAGA	GAGGAGCAGT	300
CCCTGTGGGT	TCCGTGGGAT	CCGCATGTAG	CACACAGAAAT	GAGGCACCCAC	CTCCCTTCAT	360
CCTCAAAGCT	GTCTCTGCCT	TGTTCATACA	GACAGATGGG	GGCATCACAG	TGCTGATAGC	420
GCTGATATAA	GTCTGAGAAA	GCCCCCTGGCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

GAATTCCGGCC	TTCATGGCCT	AGTGATCTCA	TCTCTCCGTC	CATGGGCAGAA	AAAACAGCCA	60
TCAACAGGCC	ATTCAACGGCTT	TGTGCTTTTG	TTAGCAGAGC	CCAGGGCAGCC	CTGCAGCCCA	120
CATCTAGGGT	ACAAACGGAA	CGGGCGCGTT	TTCCCTGTAT	CATTTAGAGG	AAATTTTGAA	180
GCTGAAACAGT	ATTTTTTTTC	TCCCTCTCTC	TCTCTCTGAA	ATATTGCTGA	GATTAAAGG	240
AGGACGAAGA	CAACAGATTTC	ATAGCTGGGT	CTTGCTGTGTT	TCCTGACGCT	GACCAACAGCG	300
GATCTAGTTT	CTCTGCAGAA	GACAGCAAGA	TGCCCCAGGG	AATGTTGTG	AAAAAGGATG	360
ACTGGATGGG	AAGCAAGCTG	AAGAAAAGA	AGGAAGAGAA	GAGAGAAATC	AGTAAATCAC	420
CACACAAGAG	GTGGAGAAGA	GGACTCGAG				449

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

GACTGGCCGC	AAGGGACGGG	TTGTGAGCAA	TGATGATGGA	AGCATATCTT	ATGAGTCAAG	60
ATCTGAACCTT	GATGTGCTG	TGGAATACT	AAACATACA	AAAAAACAAAC	GATTATGGA	120
TGGAGATAAG	AATATTGCTA	TCATCTCAGA	AGCTGCCATG	CTCGAG		166

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCTGGCC	TTCATGGCCT	ACATTATTTA	CACCTGTCCC	AGACTTTGAT	TCAGGAAC	TA	60
ATGCTGAAA	GCAAGGACTA	TGATGGAAA	TGCTCACTGC	AAGAATGGTA	GCTGCAGCAA		120
GATCAAGATC	CCAGAAAGCA	GTGGCCAAGG	CACTCACTGT	AGACTTTAGT	GCCTGCAGCA		180
TCTGGTGAA	GCTACACTGT	CTACGCCAG	GAACACAGCA	GCAGCATCG	GCCTGGCCA		240
ATTCTGTGA	AGATTGATG	CGCTGTCCT	GGCTGCAGTG	CCTGCAGACA	TCTCTCTCA		300
GCCCTTCTAA	CAATTCACA	GCAACTCAAC	ATCTTTAAA	ATTTATTAGC	CAACCAAAT		360
CAGCTTCTGT	GGCATGCAAG	TAAAAACCCA	GGCTGATATG	TCTGAATACA	GAAGATTAT		420
ATTAGTTCT	TAGAGTCAAT	AATCCATACA	GACTCTATT	TAGCTTCTTT	GTGAAGTGGG		480
TAAGAATTCC	TCTGCCTCGA	G					501

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCTGGCC	TTCATGGCCT	ACTTCAAAAA	CATATATTTA	TATTTTGTA	CCACGTAAGT	60
TCATCAGAAG	CCTGACTTTA	ATCTCTGATT	TATTATATT	GAACACTGTG	AAGAACGAGT	120
TTAACACTGA	ACGAAAGTGT	CGTAATCGAG	CTTTCAAAGT	GGCCATTTAA	GACAGATCTC	180
TGCTTTCTA	TTAGTACATT	TTCTAAGATG	ACTATCATTG	CCATTGTAGT	CAGCTTGTG	240
TACCTTTATA	GAGATTCCAG	TATAAACCCA	GAAACGCTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCTGGCC	TTCATGGCCT	AGGAAACTTT	TCAAAGAAGT	AGTCCACGAG	AACTACCTTG	60
AAAGAGCAA	ACCAGCCAGG	TGCAGTGGCT	CACGCCATA	ATCCCAGCAC	TCTGGGAGGC	120
CCAGGTGGGT	GGATCTCGTG	AGGTCAGGAG	TTCAAGACCA	GCTTGGCAA	CATGGTGAAA	180
CCCCATCTCT	GCTGAAAATA	CAAAGTTAG	CTGAAAATAC	AAAAGTGGCA	CATGCCTGTA	240
ATGCCAGCTA	CCGGAAAGG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

CTCGAGCGTA TCCCAGAACT TAAAGTATAA TAATAATAAT AATAATAATA ATAATAATAA	60
TAATAAAACC TTCCAACAAG CTTCCCTTCC ACCACAGGAA ATCCTGTTGG GAGTTCCCCC	120
TGAACCAAAA AAAAAAAAAG ATAGAGTATA AAACATACAC TTTTCAGGAA TGCTTATTGG	180
GTAATGTAAG ATAACACCTC AAAATGAAAC TCAGAATTTC ATTTCATTTT ATTTTTGAG	240
ATGGAGTCTC ACCTAGGCTG GAGTTCACTG TGTTAATCTT GGCTCACTGT AGGCCATGAA	300
GGCGGAATTTC	310

(2) INFORMATION FOR SEQ ID NO:1101:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

GCGATTGAAT TCTAGACCTG CCTCGAGTGT ACCTCATTTCT GCCATCTCTG ATATTATGTC	60
ATCTGATCAA GAAACTTACT CTTGTAACC TCATGGACGG ACTCCACTTA CCTCAGCTGA	120
TGAGCATGTA CATTCACAC TGGAGGAAG TAAAGTAACG AAATCTAAGA CTTCTCCGGT	180
GGTATCTGGT TCATCTAGTA ATCAACCAC CCTTCCAAGG CCACGACCTA CCAGGACTTC	240
CCTCTTGCGC AGAGCACGAC TTGGTGAAGC TTCAGACAGT GAACCTGCTG ATGCTGACAA	300
AGCATCTGTT GCTTCTGAAG TATCCACAAAC AAGTTCTACA TCAAAACCTC CCACAGGAAG	360
GCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1102:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

GAATTGGCC TTCATGGCCT AAGAAAGCAA GAAAGCACGA AAGCAATCAA GCAAGAAAGC	60
AAGCAGGAAA GAAACAAAAG AAAGAAAGAA NGCGAGAAAA CAAGAAAGCA CGAAAGCAAG	120
CAAGCAAGAA AGCAAGCAAG AAAGAAACAA AAGAAAGAAA GAAAGAAAGN AAACAGGAAA	180
GCAAGAAAGC ACGAAAGCAA GCNAGCAAGC AAGAAAGCAA GCAAGAAAGA AACAAAGGAA	240
AGAAAGAAAG AAAGAAAGAA AAAGAAAACA GGAAAGCAAG AAAGCACGAA AGCAAGCAAG	300
CAAGCAAGAA AGCAAGCATG AAAGAAACGA AAGAAAGAAA GAAAGCAAGA AAACGGGAAA	360
GACTCGAG	368

(2) INFORMATION FOR SEQ ID NO:1103:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

GAATTCTGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTT	60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGCC ACGTGCAGAC	120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA CCCACACACA CAGAACCAA	180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCGA TACACATATG	240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACAGGGCAGAG ACAGACAGAG	300
ACAGGCACAG ACCCCCCCCC ACCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

GAAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTGCCG TTATATCCTC	60
TCTGTTTGC AGTTTAGACA CAACTGACCA GCATTGTTAA ATGGAGATC ATACGGCTGG	120
TAGAACAGAC TCTTGTGGC CAAAATTAG CAAATTATAA ATAGAACTTA AAGCCATCCC	180
AGGCAAGGGT TAAGTTATGC ACCCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

GAATTCTGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA	60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCATAAGCACA GGAGCAAAAG TCGGGACAGA	120
GAACAAAGATA GAAATCCAA GGAGAAAAGAA AAGAGGGAT CTGATGATAA AAAAAGTAGA	180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA	240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

GAATTCTGGCC AAAGAGGGCT AGGGATGGAT GGTTCAAGCTG CTAGAATTTC GATGCAGGAC	60
TTCTCAAAA TTGAGTGGAT GATGCCCTTGCA AGAGCCTGAA AGCCGTCATT CACGGGAAAC	120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTCACACCA	180
ACACAGTAAA CAATTGCACC AAGATCTCGA G	211

(2) INFORMATION FOR SEQ ID NO:1107:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

GAATTCCGCC	AAAGAGGCCT	ACCTGCTTGA	ATTGGGGCCC	CTTGTGAAGC	TGCTGCCGCA	60
TCTCTTCCAT	TCGCTGCTT	CGGTA	CTGCT	GCAGAAACTC	TTCATCATCT	120
TCATTATGGC	AAACTCC	AGAGTCATCT	TCCC	ACTGAT	CTTCTCTGG	180
GTTTCTGTTG	CTCCTCCTCT	TCATCCAGAT	GGGAC	CTGCA	AGTCATTGAC	240
TCAGCCTTTC	CATCTCCCGG	CAA	ACTCGAG			269

(2) INFORMATION FOR SEQ ID NO:1108:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 133 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

GAATTCCGCC	AAAGAGGCCT	ATGAAAATTG	ACTGCAATTA	GTAAAGTTGG	TATAACGTAC	60
GTTCC	CAGTT	GTGCT	ATT	GAATT	ATG	120
GAGTAGTCTC	GAG					133

(2) INFORMATION FOR SEQ ID NO:1109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 123 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

GAATTCCGCC	AAAGAGGCCT	AGCTTTTCT	AATCATAAAT	TATATGACCT	TTACAGAAAA	60
TTT	AGAAAAT	ACAGAAAAC	TGAAAAGTTA	CACATGGTAC	AACTCACAAAC	120
GAG					CACAATCCTC	123

(2) INFORMATION FOR SEQ ID NO:1110:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 240 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTGGGCC AAAGAGGCCT AGTGTTCAG ATCCTACGGC TTATGAGGAT TTTCCGAATT	60
CTAAAGCTTG CCCGGCACTC GGTAGGACTT CGGTCTCTAG GTGCCACACT GAGACACAGC	120
TACCATGAAG TTGGGCTTCT CCTTCTCTTC CTCTCTGTGG GCATTTCCAT TTTCTGTG	180
CTTATCTACT CGCTGGAGAA AGATGACCAC ACATCCAGCC TCACCAGCAT CCCCCCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

GAATTGGGCC AAAGAGGCCT AGGTGGGGAG GGGAGGGGAC AGGAGAAAATG AAATACCTTC	60
ACCGAGAACT CAGCAGCTGC CACCGCAGCT GCCTCCTCAG GATCCGGTCG TCGGGGATAG	120
GGAAGGGAGG GGAAAGGGGA ACGGAAAACA AAAAAAAGGG GGAGGGAAAGG GGGAGGAAGG	180
AGTCGGGGAC GGCGCTAAAC TCAGCTCAGA GGAGTCGCTG CTGCAGCCG CACTCGGTAC	240
CCGCTGCTAG GCCTCTTTGC CGAG	264

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTGGGCC AAAGAGGCCT AAATATTAGA AAATGTATAT TATAGAACAT GATATATATT	60
TACATTCAATC TCTGTATTCT CTCAGCTGTT GTTAAAGGA CAGAATGTTA AACTTTATCT	120
TAATTAGTAT ACTAGAAAGG GCAGTATAAT ACTGTTTAA AGTGAAGGCA TGACTGAAAC	180
TAAAATATTCT CATAAGGCTT AGCTAGAGGC AGAGTAACGT GTTTTGTTC ATTGGGCTTC	240
CTTGTACTTA GTTTTTCAT TTAATAATTC AAACCAACAC TTTAAAAAAA ATAATTCAGA	300
TGAGACTGAG CCATATCTGC ACTAAGAGAA ATATTTCTTA ATGTTTTGGT TACTTATGAT	360
AGAGTACTTT TCTTGATACT GTAACTTGTG TGCTTTTAA AAAAAGTGAT TCTCTAACAG	420
ACCTCTAAA TTGTGACATG AAGGTATGTA ATTAGATTTC AGAAATTGGT TTATTAGTGA	480
GGAATTTTA TCAATAATG TCATGGGGCG GCGCTCGAG	519

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

GGCCCACCTA	GTTGGTATCC	CAAATTACA	CATTCAAAAG	CAAAGCCATT	TCTCACCTTC	60
CTCCAAAATA	CTTGTAAATTG	CTAATATCCT	GAATCCAATC	CATTCTTTAT	TTTCTATTCC	120
CAAGGCCCTT	CACAGAATCG	AAACTTTGT	TATGAGCTCT	TACATGGTGT	ATCATCAATA	180
TGTTCACTAG	ACAGGAGTTT	TTTTAAAAAA	AAATCCCTAT	CATTCCCTTT	CAATTCAAGA	240
GCTCTGATGG	CTTCCAGTCT	ATACAAGATA	TATTAAGCT	CAACTTACAG	TTCCAGTCTC	300
ACCTGCCCCA	CTTCCACCTT	CCCAAAACCT	CTGTATTCTA	GCCAGAGCAT	ACCTGCATTC	360
CCTTAGCTCA	ACATGTGTC	TTGCTCACAC	TGTCCTTGT	GTGACACTAG	CTTCAATTCC	420
TTCCTCAATG	GCAGTTATGT	GTCTACTAACG	CAGCAATGTG	AAATGCTTTT	ATTGTAGGTC	480
TGTCAAAAGC	TAAAGTCATG	GCCCCGGTGCA	GTGGCTTGGG	CCTGTAATCC	CAGCACTTIG	540
GTAGGCCTCT	TTGGCCGAAT	TC				562

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

GAATTCCGCC	AAAGAGGCCT	ATTATTGCTA	TCGCCCTCCT	TTCCCTTATT	GCCTCCAGG	60
CAAGCAGCTG	GTCAAGTCTTT	GTCAGTGTGTC	CAGCTTCCAA	AGCCTAGACA	ACCTTCTGT	120
AGCCTAAAC	GAATGGTCTT	TGCTCCAGAT	AACTCTCTT	CCTTGAGCTG	TTGTGAGCTT	180
TGAAGTAGGT	GGCTTGAGCT	AGAGATAAAA	CAGAACTTC	TGGGTAGTCC	CCTGTTGATT	240
ATCTTCAGCC	CAGGGCTTTTG	CTAGATGGAA	TGGAAAGCA	ACTTCATTG	ACACAAAGCT	300
TCTAAAGCG	GTAATTGTC	GGGGGAGAGA	GTTAGCATGT	ATGAATGTA	GGATGAGGGA	360
AGCGAAGCAA	GAGGAACCTC	TCGCCATGAT	CAGACATACA	GCTGCCCTACC	TAATGAGGAC	420
TTCAAGCCCC	CTCAG					435

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

GAATTCCGCC	AAAGAGGCCT	AGTGCCTAGA	TTGATCGGT	TAAGGCTCAC	TCTCCGCC	60
CCCAAAGTGG	TTGATCGTTG	GAACGAGAAA	AGGGCCATGT	TCGGAGTGT	TGACAACATC	120
GGGATCCGG	GAACACTTGA	AAAGCACCCC	AAAGAACGTA	TCAGGGGGCC	CATATGCC	180
CGAGGTTGGA	AAGGAAATG	ATTGCAACGT	TGTATCGAA	AGAGGAAAT	GGTTGGAAGT	240
AGAATGTTG	CTGATGACCT	GCACAAACCTT	AATAAACGCA	TCCGCTATCT	CTACAAACAC	300
TTTAACCGAC	ATCGGAAGTT	TCGATAGAAAG	AGAAACGTA	GAACCTCGA	AAAGGCTCAT	360
CTGTCACCT	GGAGAAGGGA	AACTGTA	TTCCCTGTGA	GGAAACGGCT	TTGTATTTC	420
TCTGTAATAA	AATGGGCTT	CTTGGAAATT	TGATAAGCT	AGGCCTCTT	GGCCGAA	477

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTGGCC	AAAGAGGCCT	AAAGATGAAGC	CCAACATCAT	CTTTGTACTT	TCCCTGCTCC	60
TCATCTTGG	GAAGCAAGCA	GCTGTGATGG	GACAAAAAGG	TGGATCAAAA	GGCCGATTAC	120
CAAGTGAATT	TTCCCAATT	CCACACGGAC	AAAAGGGCCA	GCACTATTCT	GGACAAAAAG	180
GCAAGCAACA	AACTGAATCC	AAAGGCAGTT	TTTCTATTCA	ATACACATAT	CATGTAGATG	240
CCAATGATCA	TGACCAGTCC	CGAAAAGTC	AGCAATATGA	TTTGATGCC	CTACATAAGA	300
CGACAAAATC	ACAAACGACAT	CTAGGTGGAA	GTCAACAAACT	GCTCCATAAT	AAACAAGAAG	360
GCAGAGACCA	TGATAAACATCA	AAAGTCATT	TTCACAGGST	AGTTATACAC	CATAAAGGAG	420
GCAAAGCTCA	TGTTGGGACA	CAAAATCCTT	CTCAAGATCA	GGGAATAGC	CCATCTGGAA	480
AGGGAATATC	CAGTCAATAT	TCAAACACAG	AAGAAAGGCT	GTGGGTTCAT	GGACTAAGTA	540
AAGAACAAAC	TTCCGTCTCT	GGTCACACAA	AAGGTAGAAA	ACAAGGGGA	TCCCAAAGCA	600
GTTATCTTCT	CCAAACTGAA					620

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAATTGGCC	AAAGAGGCCT	AGACCTGCCA	CATTTGTTAA	CATTTTCCA	TTTCTAAACC	60
ATCCCTAAAG	AAAATCATAT	ATGGGGTCAC	ACCATCCTCA	CGGTAGTCCA	ATAGAGCAAC	120
CATGCCATCT	GGATTCTATG	TTTCACCAAA	CCCTCGAG			158

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

GCACTGCTTC	TGTTAAAGTC	ACTGACCTTA	ACAGTTAGA	ACTAGATAAA	GGAAATTG	60
TGGTTGACCA	AATGTGTGAA	ATAGGTAAAC	CAGAACATT	GAATGAGGAG	GAAGCAAGGG	120
GTGTTGGTGA	GAATTATAAT	GATGAAGAAG	TGTCATTAG	AGTTGGTGA	AATACACAGC	180
CAAGTAAAGT	TTTGAACAAA	AAAAATGTAG	AAGCTATTGG	ACTTCTTGG	GGACAAAAGA	240
GCAAAGCAGA	TTATGAGCTA	TACAACAAAG	CCTCTAATCC	TGATAAGGTT	GCTAGTACAG	300
CGTTTGCTGA	AAATAGAAAT	TCTGAGACTA	GTGATACTAC	TGGGACCCAT	GAATCTGATA	360
GAAACAAAGGA	ATCCAGTGAC	CAAACAGGCA	TTAATATTAG	TGGACTCGAG		410

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCCGCC	TTCATGGCCT	AGTTGCCCTA	ATTTGCAGCC	GAACTTGGAA	GCCACTGTAT	60
CCAATGGACC	TTTCTGCAG	CTTTCTTCCC	AGTCTCTTAG	CCATAATGTT	TTTATGTCCA	120
CCAGTCCCTGC	ACTTCATGGG	TTATCATGTA	CAGCAGCAAC	TCCGAAGATA	GCAAAATTGA	180
ATAGAAAACG	ATCCAGATCA	GAGAGTGACA	GTGAGAAAGT	TCAGCCACTT	CCAATTCTTA	240
CCATTATCCG	AGGCCAACA	CTGGGGCAT	CTGCTCCTGT	GACAGTGAAA	CGGGAGAGCA	300
AAATTCTCT	TCAACCTATA	GCAACTGTT	CCAATGGAGG	CACAACACT	AAAATCAGCA	360
AAACTGTACT	TTTATCTACT	AAAAGCATGA	AAAAGAGTCA	TGAACATGGA	TCCAAGAAAT	420
CTCACTCTAA	AACCAAGCCA	GGTTATCTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

GAATTCCGCC	TTCATGGCCT	ACATGAATCT	ACTTCTGATC	CTTACCTTG	TTGCAGCTGC	60
TGTTGCTGCC	CCCTTTGATG	ATGATGACAA	GATCGTTGGG	GGCTACATCT	GTGAGGGAGAA	120
TTCTGCCCCC	TACCCAGGTGT	CCTTGAATTC	TGGCTACAC	TTCTGCCTGT	GCTCCCTCAT	180
CAGCGAACAG	TGGGTGGTGT	CAGCAGGTCA	CTGCTACAAAG	TCCCACATCC	AGGTGAGACT	240
GGGAGAGCAC	AACATCGAAG	TCCTGGAGGG	GAATGAACAG	TTCATCAATG	CAGCCAAAGAT	300
CATCCGCCAC	CCCAAATACA	ACAGCCGAC	TCTGGACAAT	GACATCCTGC	TGATCAAGCT	360
CTCCTCACCT	GCCGTCATCA	ATCCCCCGT	GTCCGCCATC	TCTCTGCCCA	CTGCCCTCC	420
AGCTGCTGCG	ACCCAGTCCC	TCATCTCCGG	CTGGGGCAAC	ACTCTGACTT	CTGCTGCCGA	480
CTACCCAGAC	GAGCTGCAGT	GCCTGGATGC	TCCCTGTGTG	AGCCAGGCTG	AGTGTGAAGC	540
CTCCTACCT	GGAAAGATTAA	CCAACAAACAT	GTTCTGTGTG	GGCTTCCTCG	AG	592

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

GAATTCCGCT	TCATGGCCTA	AATAATTTTT	ATTCAGAATA	ATAAAATCACT	CTTTATCATA	60
GTATCTTCTC	TTCCCTCTTC	CCCTTTAGTT	TGGATAGCCT	AACTCTGAGA	AGTTAACCT	120
TAAACAGTTT	TCTGGAAAGAG	ACTGAATTC	TGGGTCTGT	CAGCTGTAT	GGTTTCAGAG	180
CTCAGACTGA	TCAGGCATCA	AGCTACCCCTC	AAGAGTTCT	GGGCTGGATG	TTTCAGAAC	240
ACATCTACAC	CAGTAAAGTG	TAATAGGTCA	GTTTAAACAC	GACCAAAAGA	CCCCACCACT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC	TTCATGGCCT	AGTGAAACTC	CATTTTTTA	CTGCTATTAC	TCTGTGTTT	60
CAGTTTATG	ATTGGAATA	CCATGATGGG	AACATCTATA	CTAAGCATTC	CTTGGGGCAT	120
AAAACAGGCT	GGATTTACTA	CTGGAATGTG	TGTCATCAT	CTGATGGGCC	TTTTAACACT	180
TTATGGCTGC	TACAGAGTAG	TGAATCACC	GACTATGATG	TTTCGGTTGG	ATACCACTAG	240
CTGGGAATAT	CCAGATGTCT	GCAGACATTA	TTTCGGCTCC	TTTGGGCAGT	GGTCGAGTCT	300
CCTTTCTCC	TTGGTGTCTC	TCATTGGAGC	AATGATAGTT	TATTGGTGC	TTATGTCAA	360
TTTTCTTTT	AATACTGTTA	ACCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

AGCAATTCCA	AAAACACATC	CTGGTGTCA	CACAGCCAAG	GTTTTAGGT	TGCTATACCA	60
ATGGCTTATT	AAATGAAAAT	GGCACTAAA	GTTTCTTGA	ATTCTTTATA	CTCTCTGCCT	120
TCAGCAATCA	ATTCCATTCA	TACATCAGCA	CTCTGCTGGT	TCTGTTGAA	ATATGTTCTG	180
TATTTAAAC	TCAAATCTTG	TTGGATCTCT	GCAGGGCTTG	TGACCAATGA	AGTCATATT	240
GTTGATGGTT	GACAAAGCTT	GCTTCACTCC	ATCAGAGAAT	GACTATCAAT	TTTTTTTAA	300
CTGCTCTATC	ACGTCCTCTC	CTGTCACCCA	TTTGAAGAG	TGGCAGAACT	TGAAGTTCAA	360
CTTCCTCTGT	AAATATCCAA	GTATAAAGCC	CAGGAACCTC	TAGAATAACC	CAGATGCCT	420
TTAATTTTTT	TTAATATGTT	TTGATCACAG	AACTCCTTAG	GCCTCTTGG	CCGAATT	478

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTCGGCC	AAAGAGGCCT	AGGAATTCA	TGCAAACACT	ACTTTGAACT	GTGGTTCC	60
ATTTCACGA	AAAGTTTTCT	CTGTTCTTC	ATTATGGCAC	TTTCAGGGT	CTCCCTTGTA	120
CATTTAGTT	TTTGTGTTT	TCAGTAAGTG	CCTTGAGATC	AGGGACGGT	TCTACTGGTC	180
TGTTCCAACC	ATAGTCCCTT	AAACATTGTT	TTCCATTAA	ATTGGGTGAA	TTGAATGAA	240
TTTATAGGAA	GCTCCTTAAC	CTGGGGTCC	CAGACCTCTA	TGGGGTCCAT	GGACAGAATT	300
TGAAGTGGGA	AGGATATATG	AACTTGGATG	GAGGAAAATT	ACTTATTG	TTTTTACCAA	360
CCTCTCTTT	GTAAATTAGC	CATTTGTTCA	ATTATAATGT	AGGCAAATAA	AAATAAAAAT	420
AAAAATAAAA	TAAAGGCAGC	TTAGGCCTCT				450

(2) INFORMATION FOR SEQ ID NO:1125:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 550 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

GAATTCCGGCC	AAAGAGGCCT	ATCCTTAGTG	GATTCCGACT	TCCATGGCCA	CCGTCCCTGCT	60
GTCTATATCA	ACCAACACCT	TTTCCTGGGT	CTGATGAGCG	TCGGCATCGG	GCGCCTTAAC	120
CCGGCGTTCG	GTTCATCCCG	CAGCGCCAGT	TCTGCTTACC	AAAAGTGGCC	CACTAGGCAC	180
TCGCATTCCA	CGCCCGGCTC	CACGCCAGCG	AGCCGGCTT	CTTACCCATT	TAAAGTTGAA	240
GAATAGGTTG	AGATCGTTTC	GGGCCCAAGA	CCTCTAAATCA	TTCGCTTAC	CGGATAAAAC	300
TGGCTGGCGG	GGGTGCGTGC	GGTCTGCGAG	AGGCCAGCT	ATCCTGAGGG	AAACCTTCGGA	360
GGGAACCAAGC	TACTAGATGG	TTCGATTAGT	CTTCTGGCCC	TATACCCAGG	TCGGACGACC	420
GATTGACAG	TCAGGACCCC	TACGGACCTC	CACCAGAGTT	TCCTCTGGCT	TCGGCCCTGCC	480
CAGGCATAGT	TCACCATCTT	TCGGGTCTTA	ACACGTGCGC	TCGTGCTCCA	CCTCCCCGGC	540
CGGGCGGGCG						550

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 381 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

GAATTCCGGCC	AAAGAGGCCT	AGTTTGAGG	AAGAAGGCAT	GGGATAGTCT	GAGAACAAAC	60
AGGCACTAAA	TGGAGCAACA	TCATCTTGAG	GTGTCAAGCA	GGAGCTGGGA	GACCAAGCAGA	120
GACTCCCAG	GCCTTGCTGC	TGTTGGCTCG	CAGGCAGCTC	TGTAGGGCAG	GCTGTTGTCA	180
TTTGCAAGT	GAGCAAGCAG	AAGGCCAGGC	AGGTGAGTC	TTCACTCCAC	AGTTCTATAAC	240
TTGGATTGTG	GCTTAGTTAC	ACCTGACTCC	AAAACCTTGAC	TTTTTACTAC	TCACCTATAC	300
TGGCCTCTCA	AGAAAGGCTA	GGCCCTAATT	TCTAGACTCT	CTTTTACCAA	TAATACCTGT	360
TGCCACGAAG	TAGGCCTCTT	T				381

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

GAATTCCGGCC	AAAGAGGCCT	ACTCTCAAGG	TGGGCATATG	CAAAACATAA	TCTCTAAATT	60
CTTCATAACT	AAGAAATACC	TTTGTTTAC	CCCTAAAATC	AAATGCCATT	TTGGCTGGAT	120
ATAGGATTCT	ACGATTAAAAG	CTCTTTTCCA	GCAGAACCTT	GAAGACATTG	CTCCATTAC	180
TTCTAGCATC	CAGTGTGTCC	AGTGATAAGT	CTGCTGCAA	CCTGATTCTT	GTTCCTTGGT	240
AGGTAAATTTC	TCTTCTCTCT	CTAGAAGCCC	TTATTATTT	CTCTTATCA	CTAGAATTCC	300
AAAATTTCAC	CAAGATGTGT	CTAGGAGTC	GTCTCTTTC	ATCAATTAA	CTAGGTACTC	360

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361

(2) INFORMATION FOR SEQ ID NO:1128:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

GCAGCCAATG	GGGGCGCCAG	AGGGAAACN	GAGCTTGCT	NACGGGCCA	ACGCTGGGA	60
GCAGCCAGGC	CAGGTGGCGG	GCGCAGACTT	CGAGAGCGAG	GACGGGGCG	AGGAATTGAG	120
TGACTGGAG	GACGACTACG	ACTATCCCAG	AGAGGAGCAG	CTCAGTGGTG	CCGGCTACAG	180
AGATATCAGCC	GCTCTTGAAAG	AAGCCGACAA	GATGTTTCAG	AGAACAAAGAG	AACCAGCCT	240
GGATGGCGGG	TTTCAGATGC	ATTATGAGAA	GACCCCGTT	GATCAGTTAG	CTTTTATCGA	300
AGAGCTTTT	TCACTGATGG	TTGTCAATCG	TCTGACCGAA	GAACCCGCT	GCTCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1129:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

GATGGCACCC	TCCTCAGAAA	GCAGCGTCCC	CTCTCACAGT	ATGTCTCCC	GACGGGACAC	60
AGACTCGGAT	ACCCAGGATG	CCAATGACTC	AAGCTGTAA	TCATCTGAGA	GGAGCCTCCC	120
GGACTGTACC	CCTCACCCCCA	ACTCCATCA	CATCGATGCC	GGTCCCCGGC	AGGCCCCCAA	180
GATTGCCAG	ATCAAGCGCA	ACCTCTCTCA	TGGAGACAAC	AGCGACCCCTG	CCCTAGAGGC	240
GTCCTCGCTG	CCCCCACCCG	ACCCCTGGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:1130:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

GGCTTTCCAC	CTTCCCTGCG	GAGATGAGGG	TGGTGGCCTC	CCTTTTGTC	ACCCCTCCAA	60
GGGTATGCT	CGTCTGCTGG	CTTTCTCCA	AGATGCTGCC	AAAAATGATC	TAAIAAGAC	120
ACAAGCTGG	TGTGATATT	TCCTGATTTC	AAGTGTCTCT	GTGGTTCTTG	GTTGCCTCA	180
GGAGAGAGTT	CAAGCCTCTT	ATGGTGGTTT	GTGAGGCCAG	GCCTGAACTA	GCCCCATCGT	240
CTGTTCATTC	ACCAACCCAG	TATCCCTGCT	GCAGGTTTTT	AAAGATCTCA	TGTCCCTGAT	300
TGCCCTGTCAC	TGTGTCAC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1131:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 639 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC	60
TCACATCACG GCCTCCATAT CGAGGATCCT CAGGGCTTCG GAGATCTCGG CGCTGGGTC	120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG	180
GCAAGGAGA GCGTACTTCAG GCAGGTTCCG GAGGGCCGTC TGCACCACTT CAAACTCCTG	240
GCTGCCAGG CAGTACATGA ACGTNGGGCA GGAAAGCAGC TGCAATGNG GGGGCTGTCT	300
GCATGGAGCC CAGGGCCAGG CTGAAGGGCA GGTTCCGGCA ACACCTCTCG GCCGAGCTCA	360
TCACCCGCTG CAGGTTGCTG GAGAAGAACG TCAGGATCTC GGGTCTCCCG CGGGACATCT	420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCGG GAAAGCCGTT	480
TCATGTAGGG GGCATCTCG GCCGCGGTCA GAGGGGTGAA CAGGGAGACG CTGACCAGGG	540
GCAGGGAGCC GGCTGAGCTC TCCCTCTCGC CCTCTTCTCG CAGGGCTCTGG TCGGTCTGT	600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCCTA GGAGGGATC	639

(2) INFORMATION FOR SEQ ID NO:1132:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

GGTCTGTGGT CTTGGAGGCT TAAATTGTAA AATACATCCC TTATGGAATC CTAATTCCCT	60
CTAGGTGTTT TTGGAAGGCG CATTGAGCC TTGTGAGCTA AAATGGAATG GATTTAATAT	120
TTCCTATCTG GCATTTCCAT CTTGCCCTCG GTACACAAGT CACTGGCCTG GAACTCAGCC	180
TTGATTCACT GTCCGTCTTC ACGGATTAGC TGTGCTGTT TGTTGCTGT GCTGCAGATT	240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCCTGCTT GGAAGACTTG GGGGACTGCC	300
GAGCATATCA AAGTGTGTTAT AGTCACCAAG TGAACACTGAG CACAACCATC TCCTCTCCAG	360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA	420
AAAGCGGAGA TGACGTGGAA GTCTCGAG	448

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

GAATTGGCC TTCATGGCCT AGGGTATGG CGGGAGCTTG AGATACGGCG CTCTGAATCT	60
TGCCGCCCTG CACTGCCGCT TCGGTCACTA TCAACAGGCA GAGCTGCCCG TGCAAGGAGC	120
AATTAGGATT GCCCAGGAGT CCAACGATCA CCTGTGCTCTC CAGCACTGTT TGAGCTGGCT	180
TTATGTGCTG GGGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA	240

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA	300
TGCCCTAAAG GACTCCGACC TCCTGCCTG GAAACACAGC CTGTCAAGTC TCATCGATAT	360
CAACATCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCCGCC TTCATGGCCT AGCTGGTCT TTTATTTGG TGTCTCAGGG ATGTAAGAAGA	60
TTTTTAGTGC ATAATATTAAT ATGGCAAAT CAAATTTCCC ACAATATAAC AAAATAAAT	120
CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAATT	180
CATAGAAAAC TATCTGGAAG TGTATGTACG AAAGCATIAA CAATGGTTAT CTCTGGTAT	240
AAGAAGGAAC TAGAAGTGAA GAAGATGGG GTGATAAGGG AAGGTATACC TTTCTTTTT	300
TTTTTATTCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTC CTTGTATAAT	360
TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTT AATGACTGAT	420
CTTAGGTCCT TTTGGGTAT TTCTCCCTCG AG	452

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCCGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG	60
AGAGGAGGTA GGGAAACAGA TGGGGAGAAT CGAGCCAAGT TCTGGTGTGG AGGAAACTTT	120
CTTATTTAAC TGAGCTGCTG GCTTACATAT CTAATGTGC AGGTGATGAA TACAGGCTGG	180
GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTCTTGTA GGTCGAAAGG	240
TCAAGGTTAA TGGCTGGTT TTAGGAAACA ACTGATCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCCGCC TTCATGGCCT ACTGGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG	60
TGGATGAAAT ATTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAAA	120
CATACTGCAC TGTGTCCCTG GGAATATTTT TGTTATCTT AAAATACTCA GTATTATAGG	180
CATTTATTAA CACAGCCTTA CATTGCCCC GTTTGACCTG GAGGCCGAAA TGAATTGTGA	240

CTTATGTCCC AGCTGGGTCT CGAG

264

(2) INFORMATION FOR SEQ ID NO:1137:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 653 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

GAATTCTGGCC	TTCATGGCCT	ACCACGTTTC	CTCACCTGTA	AAATGGACAC	TGCAGCTATG	60
TCTGCTGTT	CACATTGTTG	ATAGAACTGG	ATGCTGTGGT	GACATTGTTGG	ACACTATCAT	120
GCTGCCCTGGG	GTGGGCTGGGT	GCCCCAGGCCT	GTGGGCTTCT	GTCTTTCATC	AAAGAACCTTC	180
AGATCCCAGA	AAATTAAGAT	TCTCAAAACA	TAACTGTGG	AAAGGGCTTT	TGAATCCACC	240
TTGGTGGCCT	CTTCCTGCCT	CCAGGGCTCA	TGAGATAGGC	TGACTTCATA	TGAAAGTTTT	300
GAGGATGAGG	AAGTCTCTCT	CCTCTTCAGA	TACTGACCC	CTCTCTCCTT	ATTTCTTGG	360
TGCCCAGAAT	AGGGCTTTGG	TTATCTTGAA	TGAATGAATA	TAAACTCACA	GGTGTGATCT	420
GAGCCACACTA	AAGCCCTCTT	TGGGTTCTGC	TCAGCTTGAG	GGCATCACCT	AAAGGCCACT	480
GGCTGCATT	TCCAGGAGGT	GTGTTCTAAG	CTGTATCTAT	ATAGGAATGG	GGAGGAAAGC	540
TAAGTCATTG	TAGACTGAGA	GAAAGGAAT	AAGAGTCTGT	TCCAGACCG	CTAGGGCTGA	600
CAAGCTTAGG	CAGCTGGGGG	CAGAGGGCAC	TGAGAATGAG	GCCCTAGCTC	GAG	653

(2) INFORMATION FOR SEQ ID NO:1138:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCTGGCC	TTCATGGCCT	ACAAAAGGTT	CTTGATGACC	ACCACAAATCC	TCGCTTAATC	60
AAAGATCTTC	TGCAAGACCT	AAGCTCTACC	CTCTGCATTC	TTATTAGAGG	AGTAGGGAAAG	120
TCTGTATTAG	TGGGAAACAT	CAATATTG	ATTTGCCAT	TAGAAACTAT	TCTGCCCTGG	180
CAACAACAGC	TACAGGATCT	TCAGATGACT	AAGCAAGTGA	ACAATGGCCT	CACCCTCAGT	240
GACCTTCCTC	TGACACATGCT	GAACAAACATC	CTATACCGGT	TCTCAGACGG	ATGGGACATC	300
ATCACCATT	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1139:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCTGGCC	AAAGAGGCCT	AGTTAATACT	TATTTTATTT	TCTGTTTTA	TCATCTAGTC	60
AACTCGAAA	CTTCCAGCAT	TTGTCTAAAT	CTACTCAATA	TATCCAGTA	CATCAGATAAA	120

TATATCAGTT TCATCCTCCT GAAAAACTCT TTTCCAGTGT ATCCGTACCT GCTCTAATT	180
TGACTTGATG CTTCTGTAT CTGGTCACA GCTGTTACCT TGGAATCTTC CCTTCATCAT	240
TATTCAAGT GTTCTGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:1140:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC AAAGAGGCCT AGGGTTTGT TTGGTTTGT TTAGTTTT TGTGGGAGAA	60
TTAAGATTTT TTAAGAGATA TTTCAAGATT TTTCTGTGT CAGTTTTGT AATTGTGTC	120
TTTTAGAAA ATTCATTTCA ATCCAAGTTG TTGGATTAT TGGCATAAA TTTTCAGAA	180
TATTCCTTA ATATCCTCTT AATGCTGTAA GAATCTAATC TGTATTGAG TCTCTTCATA	240
TTGGTAATTG GTGTTTTTC TATTTTCC TGGATCAGTC AGTCTAGCTG GGGAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1141:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTTGAAGCC CTTTGCCTC	60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTC CCTATAGCAT TTCTAGTGT	120
ATGGAAGTAT TAATTCTTT CTTTACTGGA AGAGCTACTA GCTTTCTTC ATACAGTTTC	180
CCTGCTCCA GTTTCATAAG TTTCTTTTG GTTGTATCT GTT TAGGATC AGGTGATATG	240
GCTTCATTTCA TCATGACTGA AGCCCCGCAA CATAACACTG AAATTCGAAT GGCACTCAGC	300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1142:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 294 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCTAT CAAGTATGAG	60
TTCTGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GCCCACCTGC	120
AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCTTAC AAAGTATTGTT GTTACAAAC	180
AGCGACCATA TAAAAGCCTC CTGCCCAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC	240

ACATACAGAC ACACACATAT ATGTACAGAC ATGTA
CTC ACACTCCAGT CGAG

294

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTGGCC	AAAGAGGCCT	AGTTTAGTT	CAGAATAACA	TTAATTGAGA	GAGATTGAGG	60
TAAGAACCT	TAACATGTC	TAAGGAGTTT	ATTTGATTA	ACATAGGTTA	TTCTGACCAC	120
CACCTCTTCC	TTCCCTTAAATC	TCCCTAGAAT	CTGACAGTCT	CAAAGCTGTC	ACACAAATTA	180
GACTAATTTT	GACACTTGAA	AATGAAAAGT	TCAAGGAAGA	AGTAGCCACG	GACAGTTATG	240
TTTATAATCA	GTAGGTGGCA	CTCTTCCCTC	AGGTAGCCCC	CCATTTCAC	ATGATGTGTT	300
TGAAGGTTAA	ATGCCACCAA	AAAGTGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTGGCC	AAAGAGGCCT	ACTTCAGCAT	GACTACTCAG	TTGCCAGCTT	ACGTGGCAAT	60
TTTGTCTTTC	TATGTCTCAA	GAGCCAGCTG	CCAGGACACT	TTCACTGCAG	CTGTTATGAA	120
GCATGCAGCG	ATATTGCCCA	ATGCCACCCCT	AACACCGATG	TCTCGTGAGG	AGGCCTTGGC	180
ATTAATGAAT	CGGAATCTGG	ACATTTGGA	AGGAGCGATC	ACATCAGCAG	CAGATCAGGG	240
TGCGCATATT	ATTGTGACTC	CAGAAGATGC	TATTTATGGC	TGGAACATTCA	ACAGGGACTC	300
TCTCTACCCA	TATTTGGAGG	ACATCCCAGA	CCCTGAAGTA	AACTGGATCC	CCTGTAATAA	360
TCGTAACAGA	TTTGGCCAGA	CCCCAGTACA	AGAAAGACTC	AGCTGCTGG	CCAAGAACAA	420
CTCTATCTAT	GTGTGCGCAA	ATATTGGGGA	CAAGAAGCCA	TGCGATACCA	GTGATCCTCA	480
GTGTCCTTCT	GATGGCCGTT	CGCTCGAG				508

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTGGCC	AAAGAGGCCT	AAATTGCTGG	CGGATTTAGA	CCGGTAGAAA	ACCCGGGATG	60
GTTCATTTTG	ATTGAGCCCA	CTCTGGGTGG	CAGAGAGGAG	GCTTGGGCTC	TGGGCCCTTT	120
ACGTTGGAG	AAATGGCTTT	ATCAGCTAG	TTGAAAGGTT	TTTCCCTCTA	GCTAGTGAAA	180
GATAAACTTG	GAAATGCAGG	TTTCTCCAGC	GGTTGGTGGT	GGGGACAGGG	GTCGCCTAGG	240

GAACTTGCAG GGGCCGCGGC CTCTGTTGTG CTCTTCTGGA GAGTGCAGTG TTTGTGGAAC	300
TTTCTAGAG TGGCAAAAC GATCTCCACT GTCGGTGAAA GGGCAGTTCC TGAAGTCAGC	360
TCATGGTCCT GGCTCCCCCTT CTCCCCAGCA GTGAACGTGG GGTGACTTCC TGATCTGCC	420
AGCACAGGAG AGCCCCGCAA AGCGCCTGGG AGGCCCTCGA G	461

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

GAATTCTGGCC TTCATGGCCT ACCATTTGG ATTGATTTTG GTGTATAGTG TAAGATGAAC	60
CCAATTCCT TCCTTAGCAT GTGGGAATTG TGTTTTCTG TCACCCCTTT TTTTGAGAT	120
GGGGTCTCAC TATGTTGCCG AGGTTGGCCA TGAACCTCTG AGGTCTATGTG ATCCTCC	180
CTCAGCCTCC TGAGTAGCTA GGACTACAGG CATGTGCCAC TGTGCCCTGGC TCCAGCAACA	240
GTTGTTGAAG AGACTGTTCT TTATTTACTT ATTGTATCCT CTGTGCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GAATTCTGGCC TTCATGGCCT ACCCACCTGC CCACGCCGAC TTGGGAGGAT GGTGGCCTGC	60
AGCGGCCAAG AAGCCAAAA AAAAATTGTT TTGATTTTCA GATACTGTGC TTGATTTTG	120
GAGAGGGGAG AGGTGGAAAT TCCTAAATGG CTAATGCCT GTTCCCTCCA GCCCGAATGC	180
CTCTGCCAA ACCCTTTTC CCTGCTGCCT CTGTCCTGGC ATCCCTGTT CTCCTGGGT	240
CCGAAACATT TTTCCGAGG ATGAAACAGGG GACATTTA GGTTCTCAA CTCTGCTTT	300
GGTGTGCCC GCAGCATGGA AAACAGGCAC CCCTCGAG	338

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GCAGGAATCA GATTCACTCA TTAGTAAGCC GCACTCGCTG AAGGGGAGAG CATGAGCAAG	60
GCAGACGTGA GCCACTGCGC CCGGCCTGAA GAGTTTTGC TAATGGATA TTAGGGAAA	120
CCACAGGATG CATTAAAGACA AGAGAGGGAA GGTAAAGGTTG TAGACAGCAG GATTATGTCT	180
GTTAGTTGGT TTATGTGTCAC TTTCTAGCC AAGCTGTACC ATCCCTGTTT TGTTGGTTGG	240
TGAATGCTTC CAGCTCTTT CCTCCAGCCC TTGGAAGAGG TGGCCTATA ATTGTTAAC	300

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAAGTTGA AGGCTGCAGG	360
GCTCTTGCA GGCGGCTTAC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCTGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC	60
AAAGGCACAG AAAACACAGAA GAGCATGTT TACAACCTGG CTATAGTTTA GATTTTGTGT	120
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTTGTG GGGCGCACGC ACGCATTGT	180
AGGAGGTAGG GAGAAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG	240
CTAAGATGTT TGACAATTTC ATTCTAAGCA GTGAGTTTT AAATTAGAC ATGCAATCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCTGGCC AAAGAGGCCT AATTGAATTG TATTGGCTT TTTCTCTTA ATATTTAGG	60
TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTGTG AAATAAGCTG CAAATATTT	120
TTCCCTCAATT TTCTTTGTG CTCTTGTCT TATTTCTGGT GTTTATTTT CCCCAAGGTGT	180
ACTGTTTCT ATGCCAAAT TATTGATCTT TTCTTAACT GCTTTTTGT TCACCAAAG	240
GAAGGTTTC ACCACTGAGA CCTTATAAAA TAATTCACTC ATATTTTAC TCTTTTTTT	300
TGCTTATGTT AATTTTTGT TTGGAACAT CTCAAATCA CAGAAGTGTG TTGAGTACGT	360
TGCAAATAAC TTGTTTTTC CTTATGCATT TCAGAGTAAG TTACCAAGTCC GCGCTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCTGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTGA TCTCCTGCAG	60
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCCGG TCGGGCCACT CCAAGAGCCT	120
CTCCCTGGCA GGCGCTGGCT CCCGGCTTCC AGAAACACGA TTTGCTGCT TTAGAGCTTC	180
TGCTGCCAAC TGGGCCTTCT CCTTTTCAGC TTGTGCCGGG CCCGCTTGGC	240
GGCCCTGGCG CTGTTGGGGA CTTTGGCTC CGTGCTGTT ATGAATTCCA GCAGCTCATC	300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCG CCCAGGGTC CCCCTTCAT	360
GGGCAGCTCC TCTTCCGCC TGGTCAGCCT CGAG	394

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCCGCC AAAGAGGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGTTGT	60
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA	120
GTCAGCC AACGAAGCCT GTTTCTTCC CTTTCTTCC ACTCCACGC CGCAGTCAGA	180
TTCCTGAATC ATGCTGACGT CATTGCCCTC GTCCCCACT GCACAGGTGA GCTTGGCGT	240
GCGCTCTGA AGCAGGGCGCA CGATCTGGC CTTCTGGTG GGGGCACATC NGCAGCAGAC	300
TACGGCGGG CACTGGCAGG CCAGCTCCAT GAACTCGTAC TCATAGTACT TGAGGCAAAC	360
CTCCAGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCTCGGGA AGGCAGTCAG	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCCGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTTGCACCAT GCCAAGCATT	60
CGGCTTGGAT TATCCCATTG GTTTCTCACCA GCCGGTATTT ATTGCTCTGCT CCTCTGTGCC	120
AGGTGCTGTG CTCTGGGCAG GGGCACTGCA TGGGCTGCC GCCCCTGGTGG AGCTTGTGGT	180
CTGATGGGTG AGGCTGACCC AAGCCCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA	240
CACAGGGGCC TCATACCATA TGTCCTCGAG	270

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCCGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAAA CTCAAACAGT AGACTTCAGC	60
ACACAAGGAA AGCCAAAGCC ATTTGAGGGG GAATAAGCC AAAAGCTTT CACCTTATTG	120
GTTCAGGAA TCTCACCGCC CCCTCCTTAT CCCCTCCAA AAATAAGCCA TTGCACACAG	180
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCG GACATCACAA	240
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA	300

CCACAGCCTG ACGTGGCCAA GGACAGTTGG GCAGCAGAAC TTGAAAACTC TTCAAAGAA	360
AACGAAGTGA TAGAGGTGAA ATCTATGGGG GAAAGCCAGT CCAAAAAACT CCAAGGTGGT	420
TATGAGTGCA AATACTGCCCT CTACTCCACG CAAACCTGA ACGAGTCAC GGAGCATGTC	480
GACATGCAGC ATCCCACAGT GATTCTAAC CCCCCTACG TGTGTGCAGA ATGTAACCTTC	540
ACAAACCAAAA AGTACGACTC CCTATCCGAC CACAGACTCG AG	582

(2) INFORMATION FOR SEQ ID NO:1155:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCTGGCC TTCATGGCCT AGGATCCGTG AGGGAGACCG CATCATCCAG ATTAACGGTG	60
TAGACGTCCA GAACCGGGAA GAGCGGGTGG CCATCTCGAG CCAGGAAGAG AACACCAACA	120
TCTCCCTGCT GGTGGCCCGA CCTGAGAGTC AGCTGGCGAA AAGGTGGAAG GACAGCGACC	180
GGGATGACTT CCTGGATGAC TTGGCTCTG AGAATGAGGG GGAGCTGCGT GCTCGTAAAC	240
TGAAATCACC CCCCTGCCAG CAGCCCGGAA ACACCTCGAC	279

(2) INFORMATION FOR SEQ ID NO:1156:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCTGGCC AAAGAGGCCT ACATTGTTAA TATAATTAA CAGAAGTTGT GAAACTAAAA	60
TTTTCTAAGA TTAACCTGGTA GTTCATTGTA ATGAACATA ATGAACAGAA TTTATGACTC	120
CACTGTGGAA ATAGCTATCA AATAACTAAG GAATATATAT GGAATAAGTG TACATATGTA	180
AAATATTGTT ACTAGAGTTA GATATGTGCC AAAGTCCATT TATCCAAAT CCTGTCTGAA	240
AAGGAGGGGT ACATTGGTAA ACATTTGGAA GTGCTTAAAT ATGCCAAAAA CAAAATGGTA	300
ATTTCTACTT TGATAAAAGTA AAAAGTAAAT ATGTGTGTAA AAAAGTGTCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1157:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCTGGCC TTCATGGCCT ACGGTGGCCCT TTGGGGCCGA AGTGGGCGTG CGGCTCGCGC	60
TGTTCTCGGGC CTTCCTGGTG ACGGAGCTGC TCCCCCGTT CCAGAGACTC ATCCAGCCGG	120
AGGAGATGTG GCTCTACCGG AACCCCTACG TGGAGGGGA GTATTTCCCC ACCAAGCCGA	180
TGTTGTGCG TGGAGAAAGA TCGTCTTTCC TCCCCTCCCCA TGACCGGGCT TCCCGCGGGC	240

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCA CTCCGCTGCT 300
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCCGCC TTCATGGCCT AAAAACTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60
GTTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTT AGTTTTGTAC TATTGTTG 120
TTGGTGAATT TTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCCGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60
CTGGAGTTCA AGACCAAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120
CTTTACTGTT GCCTCTATTG ACTCTGAAT GCAAGAAAGA ACATTTGCCC TTTGACTTCT 180
AATATTATCT TATATTCTCT CTTCTTCAAA AGATCAGAAG CACATGCTGT AAACATCAAT 240
CATGATCATC TTGTCCTCCC TTATCAGATT GTCAAATTA TATCTTTCC TATTTCTG 300
CATACTTAT CTTTTCTCTA AATTCTCAGT TCTCAGATT CTCAGAAATC ATAACCTCAG 360
ACCTTGAAAT GATGACTCTG TTCCACCCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATAACTA TAGGGCAGGT GGGCAGGAA 120
CGGGTTAAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180
TTCTCTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATAACAG GAGCTAGATC 240
CGTCCCTCTGC AGGGGCTCTG AGGGTCCAGA GCTCCCTTCG GGTGGGGGA AGCCAGTGGC 300
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGGTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 597 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

CCCCCGGAGC ATCTTAAGAG CTGAGCGAG CTGACAACTA GGGGCCGGAC CGTCGGAGGA	60
GGCGTCCGCT GGATACCTTC CCCCTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT	120
ACTGACCGAG GTTCCCAGA GCTGTCTCAC CATTGAAAA ACGTTATAGC AACAGCCTCT	180
GATTACGACA TGCGTAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG	240
GCCGCCCTCA TCGGGCCTC TGTGCTGGTG GTGTGTGCT CGGTGACCGT CTTTGTCTGG	300
TCATGCTGCC ACCAGCAGGC AGAGAAGAG CACAAGAAC CACCATAACAA GTTTATTACAC	360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA	420
GTGCGGAGAG ACAAAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC	480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCA GGGGCCCTAG CTCTGGATCT	540
TGTATAGACC AATTACCCAT CAAAATGGAC TATGGGAAG AACTAAGGAA CCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:1162:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 476 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

GAATTCTGGCC TTCATGGCCT AGAAATAACT TAAAATCCGT AATCAGATGT TTCTCCGTAC	60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT	120
CAGAGCTCC TTTCAGTGTG GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTGA	180
AACCAAGCTG GCAACATGG TGAAGGCCCCT TCTCTACTAA AAACACAAAA ATTAGCTGAA	240
ATGGTGAATG TAATCCCAGC TACTCAGGAG GCTGAGGAG CAGAATCCGCT TGAATCCGGG	300
AGGCGGAGGT TGCACTGAGC TGAGATCGTG CCATTTCACTT CCAGCCTGGG CAACAGAGCA	360
AGCCATCACCA GATTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGGTAACCTG	420
GCAAGAGCTG ACAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

GAATTCTGGCC AAAGAGGCCT AGATGAACAT GAACCTGGG GAGCTGTACC TGGCGGACAA	60
CAAGCTAAC GGCCTGCAGG ACTCGGGCCA GCTGGGTAAC CTGCTCAAGT TCAACTGCTC	120
CCTGCAGATC CTGGACCTCC GGAACAAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG	180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCCCTG GTGCTGTGGA ACAACCAGCT	240
CACGCACACA GGCATGGCCT TCCTGGGAT GACACTGCCG CACACTCAGA GCCTGGAGAC	300

GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT	360
CATCAGCAAC CGCAGCGTGC TGGGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGCAGGG	420
CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCCGC CTCCCTGAGAC TGAACCCCTCG	480
AG	482

(2) INFORMATION FOR SEQ ID NO:1164:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 494 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

GAATTCTGCC AAAGAGGCC AAGGAGCGCT GTTAAAGCTG ATACATTCT GTGGGTCAAC	60
TATGCAACTA ACTCAGATT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC	120
TCTGCATTAG TTGGACAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GTTGGGTAG	180
GTGGCTCTGC TGATTTTCG CTGGACTTCC ACATTTGGGA CCAGTTGGCT GTNATCAGCT	240
CTAGAAAGGG TGTTGGCTTT TTACATTGGC TGTTTTCTC ACATTCTCA AGCAGGTACT	300
GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT	360
GCCATCTAAT GGGGGAGACA GGCAAGTAA CCAAAGACTA CACAGTGCAG TATGGTAAGT	420
GCCATGATTG TGATGTGACA GGGCACAGTG GACGACCTTC CAAATCAAAG CAAGTAAC	480
GGGGCAGACT CGAG	494

(2) INFORMATION FOR SEQ ID NO:1165:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

GAATTCTGCC TTCATGGCCT AACTCTTATC TGTGAACACA ACTTTTCAGC ACTACAAATG	60
CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTGGG AATCCAGTTT AGGCTGATT	120
GAAAAGACAA CAGCATTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC	180
CATTTTTGT TTCTCTGAAGA CGGGCTTTTT TTCTTTTTA TTATTATTAT TTTTTAAAT	240
TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1166:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

GAATTCTGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGTATGAA GTATAGAGGT	60
GGGAAGTTG AGGGTAGAGA AGTANTAGCA GGAATAGAA ATAGGGGAC AGAAAAATAG	120

AGTGGAGCCA GATTCAGAGA ACTTTNAGAA GCAGGTAAG AAGTTTAGGA TTAATGGACA	180
AGTCATTGGG TCTCCAGGT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG	240
ATTAATCTGA AAGGAGGTAA CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

GAATTCTGGCC TTCATGGCCT AGGTTAAATAA TGCCAAGTTA CTGGGGCTA GAAAGAAAAGT	60
TTTCCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTCT TCAGCAGGGG TGTTGGTCCT	120
TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGCCATG	180
TTTGAGAAGG TGACTGATGG TGGTGGAAAGT CCTTCCTGTG ATGAGTTAAT GATGCGTATT	240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAACCA AATCTACCCCT TCATGCAGAA	300
AGAAAGAGCT CTTGGGCCAT TCTCTTAA TGAAACCATA CCAGGGTCAA TATTACAGTG	360
TCTCTGAAAT ACACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG	420
CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA	480
GTTGGGCAGT CAACTCGAG	499

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCTGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTGTGG	60
GGTACAATCC ACTCAACTCT ATTATGAAGC CAAAAAAATA AATCTGTTAA AAACAATAAT	120
AGCTACACCA ACCTGTTAAC AGATAGGTAA TATAAAAATA TATAGTTGA GACAAC TAAA	180
TCAAAATGGA GGAGGGGATA GAGTTCAAGA AGTAAAGATT TTTTGCCTGT GCTTTCTTG	240
GCCTTGTGTT GCTTCTATTG TTTTATTTGG AATCAAGAT AAGTTATCAA CTCTTTAAA	300
TAACCTGTTA TATGTATAAG ATGTTTCTG TAAGCCTCAT GGTAACCCCA GTACAAAAAC	360
CTATAGTACA ATTCCCTAAA ATAAAATACA AAAAATTAA AATATACTAC CAGAGAGCTC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

GAATTGGGCC TTCATGGCCT AAAAGGTTG ATCTTGTAAAT GTGTCAGTGT GTTTCCTTAG	60
TGGCCAGCCA GCCTTCAGAA TAGCTAAAGG CCTTCCTTC TTCCAGTCAG CCTGAGAGAG	120
AACACCTGTC CCCTAACGCAC CTGGTGTCTC CATTGGAGGC AGACTGCTCT CAGGAGACTA	180
CTAGAAAGCTT CAGCCCCGAA GACAGGCTGC TCTCTCATGC TGGTGCCCCA ATTGAGAAA	240
GTGGTGTCCC TTCTGATTT TGCCACCAGC CCTACCGAAT AGTTGAAAC CAGTATCAGG	300
AATTGGGATC CTCTCGAG	318

(2) INFORMATION FOR SEQ ID NO:1170:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GAATTGGGCC TTCATGGCCT ACATTGGTCG TTTTATTGCC ATGGCACTAT TTCATGGAAA	60
GTTTATCGAT ACTGGTTTCT CTTTACCAATT CTACAAGCGT ATGTTAAAGTA AAAAACTTAC	120
TATTAAGGAT TTGAAATCTA TTGATACTGA ATTTTATAAC TCCCTTATCT GGATAAGAGA	180
TAACAAACATT GAAGAAATGTG GCTCTGAAAT GTACTTTCT GTTGACATGG AGATTGGGG	240
AAAAGTTACT TCACATGACC TGAAGTTGGG AGGTTCCAAT ATTCTGGTGA CTGAGGAGAA	300
CAAAGATGAA TATATTGGTT TAATGACAGA ACGCGTTGG CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1171:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 240 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTGGGCC TTCATGGCCT ACACTTTATT CCCTTTAAG TCTGGTAAAG AATGAATACT	60
TGGACGTTT GTTTCATGCA GATTTAGTTA GCAACTCGAT TATCAAATGG TAGAATATCT	120
GTATGCACTG AAGCCAAATT CTCAGTAACT CAGCTTGTG TAGTCATATG AGGATGATGA	180
ATAATAGGAN TCCAGAGCAG TTAACAAATT GATACAAGTG GTAGGAAAT TTGATATGAA	240

(2) INFORMATION FOR SEQ ID NO:1172:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAATTGGGCC TTCATGGCCT AGTTTCNTTT TTGTTATCTCT ACTGATATCA CCAGGGATAGT	60
NTACTCTCCT TCTAGCTTTC TGCTTACCGC ACACGGATA ACACACACAT ACACACCCAC	120
AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG GTCCCCCACC CTCCCTCCT	180
CCTCCTACTT CTCCCTCTGAG CAGCGAGGAC AGGAGGGGAA CAAGGGGACA CCTGGGCAGA	240

CCCGCCGGCT CTCCCCCAC CCCACCCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCCGCC TTCAATGGCCT AGAAAAGTCT AGAAAATAGC TTAAATAACA AACACGTGTG	60
GATTGTTAG ACCAAGAGCA AGGGAGACCA TTTAATGCAG TTATTTAACCA ATATTTAGTA	120
CTTTCCTTTA CCTTGTCTGC TGTGCCATCA TTCATGCCTG TCAGTGTAA AAATCCCCAA	180
ATTTCCCAA CAGATTTCA TTTCACTTCC GTCAACTTT AAATTAAGT TTAAATTC	240
CTGCCCCAC TCCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT TTTGATGTCA AAATGGAAAA TGAAAAGTTA GTTTTAGCAT GTGAAGATGT	60
GAGGCATCG TTAGAAGAAC GTCTTGCTGG TAACAATCAG CTTCTCTGG AAAAAAACAC	120
TATTGTTGAG ACTCTAAAAA TGGAAAAGG AGAGATAGAG GCAGAATTGT GTTGGGCTAA	180
AAAGAGGCTG TTGGAAGAAC CAAACAGTA TGAGAAAACC ATTGAAGAAC GTCTTGCTGG	240
TAACAATCAG CTTCTCTGG AAAAAAACAC TATTGTGGAG ACTCTAAAAA TGGAAGAAGG	300
AGAGATAGAG GCAGAATTGT GTCGGCCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCCGCC TTCAATGGCCT AGTGCTTGAA CTCACGCATC TGTTTTACCT GCATCTGCAG	60
GCGATGGGGC AGGGGCCACG GAAAGAGTCT GAGGGCTGCT TGGTGTAGTC AGGTGTGTC	120
CAGGCATCG GAGCTGTGAG TGCCTGCAGG AGAGACACCC AGGAGGAGTT TTTACATTTC	180
GGTCTAAAAA GCTCTGGAT TCATCTCATC TCATGGAATG ATCCTGTCGG ATGACGCTGA	240
CGTGATTGCT TCAGACTTAG AGGTGAATAA ATTGAGGTCC AGAGAGGTCA CAGTCACGAA	300
GCTCATGGTA GACTGAGGCC ACTAAACACC CGTCTCTGA TTTTCAGTGG CGTCCTCATT	360
TGCATACACC TGGGCCATCT TGGTTTTGCA AAGAAAACTC GAG	403

(2) INFORMATION FOR SEQ ID NO:1176:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 590 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

GAATTCCGCC	TTCATGGCCT	AGGTACCTTG	AACATGGCTG	TAAATTAATC	TTTAAC TGCC	60
TTGGTGGAGT	CTTCCTGATT	TATTGAAGAG	AATAATCACG	AAAATAATTT	TTGTTTGTTT	120
TTTGAGACGG	AGTCTCGCTC	TGTCAACCAAG	GCTGGACTGC	AGTGCCACGA	TCTCGGCTCA	180
CTGCAGCCTC	TGCCCTCCAG	GTTCAAGTGA	TTCTCCTGAT	TGAGCCTCCT	GAATAGCTGG	240
GATTATAGGT	GTGCACTACC	ATGACCAGCT	AATTTTGTA	TTTTTAGTAG	AGATGGTGTT	300
TCACCATGTT	GGACCGGGCT	GGTCTCGAAC	TCCTGACCTC	AGGTGATCTG	CCCTCCCTCAG	360
CTTCCCAAAG	TGTTGGGATT	ACAGGCATGA	GCCACCGCAC	CTGACATAAA	TATTAAATGT	420
AATACCGTGT	AAGACTTTTC	CATTGGGTTT	TGAGAAACAC	GTTAATGAGA	GAAATTGCTT	480
AACATTGGAG	AGGATTGCAG	AGAATATTGA	CTAATATGGT	GGGGTGAGGA	GGAACAAACAT	540
CAATTAAGAT	TCAGATTAT	TATTAAAAAA	AACTAAAAGG	CGGCCTCGAG		590

(2) INFORMATION FOR SEQ ID NO:1177:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 562 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

CTCGAGGTAG	CCACAGTCCT	GATCCTAGTG	ACAAATGGGG	GCATGGTGTCT	ACATCCGGGT	60
CGGGGGAGGG	CTCATTTCAT	CTGGCCTGGG	GGGAATGAG	TATTAATTTG	TTTACACAGA	120
CGTAAACACA	GCCCAAAACG	CATCAGCAGC	TTGACTCAA	CGCCCGCAAC	GCCAGGGCAA	180
AGGCAATTG	GTAAACAGGG	GGAAAGCGAAC	AGACGGAGAC	GCCCTGGAGAC	CCAGGTGCCA	240
CAACCCGGTT	AATCGCGGTG	CAAAATAAGGG	CAAGTCCCCCT	CCCCTTGTC	GTGTGGTCTT	300
GACAACGACA	CTAGTTTCATT	CTACTAACAA	GGCGGGCGGG	GGTCAGATG	GGCCACACAC	360
ACCCATTTC	CTCAACGGGA	CCCCAACGCG	ATCTCAGCCT	TGCTGTGCTA	CTTTAGGGCA	420
AGACGGCGTTC	CCCATTGGA	AGCCGCGAGGA	AAGCGCGGG	AGAGCGGGTT	AGCCCTCGGA	480
CGCGCTAAGA	GCCTCGGAAT	ACCCGAGAGG	AAGTCCCCAC	CCCTCTCGGG	GCTGGGAGCC	540
CTAGGCCATG	AAGGCCGAAT	TC				562

(2) INFORMATION FOR SEQ ID NO:1178:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

GAATTCCGCC	TTCATGGCCT	AGAAGCACAG	GTAAAACAAG	CTGGGGCTTA	TGGTCAGCAT	60
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TGGAAAGCAGG GAGCAGACTG GGGAAAACAG CAGTCTTATG GGACTGAGTC CTCAATCTGT	120
GTGATCTGAC TCTATCTGCA AGGTAGTGTGTT CGAAGTGAAAC AGGGTTGGAG AATGCCAGC	180
TGGTGTCCAC CGCAGAATTG ATTCATGTT TGGTATGCAG GGACCCCCCA CTCCACACTT	240
AGTCACAGAA ATCTGTGTTG ATTGTTGTGG CATGAAAGCA GGGAAAAATA GTTTGTTTTT	300
TTCTCCACAC TTCCCTCCCA AGATCCCGGC TAACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

GAATTCGGCC TTCATGGCCT ACTCACCGGA GAAAAGAAGT TTCNGAAGAA AACACAAACC	60
ATGCCAATGA AGCAATGCTA TTTCATGGGT CTCCCTTTGT GAATGCAATT ATCCACAAAG	120
GCTTGTGATGA AAGGCATGCG TACATAGGTG GTATGTTGG AGCTGGCATT TATTGGCTG	180
AAAACCTCTTC CAAAGCAAT CAATATGTTAT ATGGAATTGG AGGAGGACT GGGTGTCCAG	240
TTCACAAAGA CAGATTTGT TACATTTGCC ACAGGCAGCT GCTCTTTGC CGGGTAACCT	300
TGGGAAAGTC TTCCCTGCG AGTTCAGTGC AA TGAAAATGGC ACATCTCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC AAAGAGGCCT ACAGAGTGCT GTGCTTAAGT TTTACTTCTT TCCACCTTTA	60
AATCTCTGAT AAGTTCTTT TTATCTAAAG GTTCCACTTT GTTCATTACT TTTTGTTC	120
TTATTATTGA TTGTTGAG AACCTGAGTT TCTTGACCTG TGTGATTTG TACCACCTGG	180
ACTTTCTGAC TGTTGTTGCC CAGGCTGGAG AGCAGTGGTG GGATCATAGC TTACTGGACT	240
CAAGCCATCC TCCCGCCTCA GCCTCCCAAG TAACTGGGAC TATGGGCACA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC TTCATGGCCT ACTTGAGTTG TACATTAGAT CTTTAAACTT GTTAGTCCTA	60
CATATCTGCT ATTTTTATC CTTTGACCTA CATTTCCCA TTTCCTCCA GTGTTCTCTC	120
CCCAGGTAAT CATTGTTTTA TTCCCTTTCT CTGTAAATT GACTTTTTT TTGGATTCC	180
ACATATAAGT GAGATCATGA TCATGCGGTA TTTTCTTTC TGTGTCGGC TTATTCACA	240

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1182:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 192 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT	60
AGCTGTAAGA TCGCCTCAA TATCGTCTC TGTTGTCATT TGCCTTTCT CTGTGTCTGT	120
GTTCAAATGT CCTTTTTTTT TTTTTTTTA GGGAGTCTTG CTCTGTTGCC CACTCAAAC	180
GCTGGGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:1183:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTTCTGTTA CATTGTTAG AGAATAATGA	60
CAAGAACAAA AATCTGTGTG TTCACTATAG ACACAACCAT CCTTTTCTTT TTTTTTTTTT	120
TGAGACAGAG TCTCGCTCTT GTTGCCCAGG CTGGAGTGCA AGGGTGCAT CTCAGCTCAC	180
CGCAACCTCC GCCTCCCCGG TTCAAGCAAT TCTCTGCCT CAGCCCCCG AGTAGCTGGG	240
ATCACAGGCA TGTGCCACCA CGCCCGCTC TTTTTGTATT TTTAGTAGAA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1184:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 234 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGAC TACTACAGGT GATACTACAG TGACTACTAC AGTAATTCCG ACTACTACAG	60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGAC TACTACAGGT AATTCCGACT	120
ACTACAGGTG AGCTAATTG GACTACTACA GGTGGACATA ATTCCGACTA CTACAGGTGC	180
ACCTGTAGTG GAGAACATTG AGCAATGATA AAGCCGCTGC TGATCCTCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:1185:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GAATTGGCC AAAGAGGCCT AGAACAGTTT AGAAACAAATT TCCCTGCCTT TGCTTGCGGT	60
TCCCTGTGAT TGGTCTCCAC ACTGTTTTCG TGGCTCTATC TGTCTCCCTT GCCACGGCCA	120
CTCAAGCCTA GCTGCCAAC AGCTCCCTCC CTGAAGAACCC CGGCCTTCA GGCTTGACAG	180
GTGATCTCAT CCTCTCTTCTT TTCCCTCCAGG TTGTTGAGA CTTCCACCTT CCCTCTTCT	240
CCTGGTCTT TCCCCTTCTT AGTCCAATG TGGGCCACGC TTTCATCCCA CCTACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GAATTGGCC TTCATGGCCT AGTGATGAGC CCTCCTCTTC AGCTAGGAAA ATGACGGTGT	60
TCAGAAAGTT AAAACTTCTT CGCTGGAAGG ATTTCATCTT AAAGTTGGGA GACTGGAAGA	120
AATTAAAGTG TTCTAAATGG AAAGAGCATTC ACCACATGTG TTCTGTTTG GGTTGACATT	180
TAGCTTTTGT TTTTATTGTTA GAAACGGAAG ACTCTGGTAG CAGTCCTTGA AATCTTGATG	240
CCATTGCTAT TTCTGCATT GTATTGTATC TTCTGTTAG TAGTGCTCCA ATAAAAAGAC	300
CTGACTACTAG CTGCAAAACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTGGCC TTCATGGCCT AGTACGTTGC TGAAAAGAAG TTTATTGCTA TTTCTTATT	60
TTATTTATACA AAACTAGATT TGCTTAAACG ATTTCCCGAT CTCTTTAAAG GAATGCTAGT	120
TAGTGGGAGG CCACAGCTAG TAAATTACCC TCAGTAGTGG TTTCAAGTAG TCCATAACTA	180
TAAAAAATCGT TACGGCCAGG ATATGCCGA ACAGAACACT CCCCACTGGG GTCTCAGCC	240
TTGGATGTCA GCTCGGCCCT TCAAGGGGTC CCTACACCTG GAAGCTGATT CCACTCATCA	300
GTCTCGAG	308

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTCGGCC TTCATGGCCT AGAATGAAGA AGGTTCCAA GAAGTTAGAG GAGATTCCCC	60
CAGCCTCTCC GGAGATGGCA CAGATGAGGA AGCAGTGCT GGACTATCAT TACCAAGGAGA	120
TGCAAGCTCT GAAGGAGGTC TTCAAGGAGT ATTTGATTGA ACTGTTTTTC TTGCAACACT	180
TTCAAGGAA CATGATGGAT TTCTTAGCTT TCAAGAAGAA ACATTATGCC CCATTACAAG	240
CACCACTCGA G	251

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC TTCATGGCCT AAGGAGTTGG AAATTGTGCA CAAAGAAAGG TGGTGAATAA	60
GTAAAGTCGT AAATTCAAGA CCACAACAGA AAGCTTCACT GCAGACACTG GACTTGAACC	120
ACCATTGAAA ACAGTCAGGA TTTGGAGATG ATAATTAGGA GGATGTGTAT TCTAGCTGTG	180
GAATTTATTG TGGGCAAGCA TAGGAATGAG AAAGTACAAT GAAAAAAATGT AAGTAGACCC	240
ACCAAGTTAG AGAAGAAGGT CCTGGTTAAC AAAAATGAAA GATTTTTTG AACAAACAGAT	300
TAATGTGATG AAATAGATGT TCAAGAGTGA AGATAAGTTG AAGATAGGGA CCCCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GTTGTTAGGC TGGTGTGTT ATGTTGCTGT TGTTATGCTG GTCGTGCTGC TCCATGTTCT	60
CCAGGTGTTTC TTCCCTTTTA TCGTCACAGT TACCCCGTAC ACCTGACAAC TGGACATCTG	120
CGCCTGGGCT CTTCAGCCTA AACACACCTA AACCCCTCAC CAAACCCCTC TGCTTCCGCC	180
TCCCCGTGTC TGTGAGGCC TCCACTGCC ATCCCTCTGC TCAGGCCCA TTTCCAGGGC	240
TCGAG	245

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTGGCC TTCATGGCCT AGTCTAAAAA AAAAAAAA AAAATAGTGT TCAGCAAGGT	60
TGAAGCATAA AAGGTTAATA GCCAGAATCA TTTATCAATT GTATTTCTAT ACATCTACAA	120
GACACAATCT GAAAATGAAA TTAGAGAAC AATTCACTG GGCAACAAGA GCAAAACTTC	180
ATCTCAAAT AATCATCATC ATCATCATCA TCATCATCAT CATCATCTAC AATGTCATT	240
CCCATCCAAC GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1192:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 748 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTGGCC TTCATGGCCT AAGGACATGG CAGAGTTCT GCTAAAAGAG AAGACAGTTA	60
TTTAAGGAGG TTGAGATTC AAGGGCTTTT TTAATTAA AATTAACCAT GGTAGAAACC	120
TGTCGTAA TATGCTGAGG GAAGTTGCCA ATAGTGAGAT GAAAGATCTA GGCAGGGGA	180
TAGCAAGGTTG ACTGCACCAAG ATACCTGGAT CTGGGCAGGA ATAAACCTCA ACAGTGATCA	240
TGTTGACCTT GAGTGACAGG GTATAATGTT TGGGAAGGTG CTTTGTAAC TATAAGGGC	300
AATACAAACA TGAGTACAC CTTCTCTGAG ATCCGGAAA GGACAACTG AGCATAGGTT	360
GGGGCTGGTC ATAGGCCACT CTCCCCTACT GTTTCTCTAG AGTGTGTGA GTCCCTAGCA	420
AGCTTCAGAT GCCTCGACCT TCATGCCCTA GAGAGTTCTC ATCAGAACAG GAAGGCAGTG	480
ATGATCCATT GCATGGGCAG GATTGTTCTA CGAAGACAA GATCTCCGGA AAGTGAAGAA	540
GACCCGGAGG AAACTAACCT CAACCTCTGC CATCACAAAGG CAACCTAACAA TCAAACAGAA	600
GTTTGTGGCC CTCCGTAAAGC GGTTAAAGT TTCAGATGAG GTGGGCTTTG GGCCTGGAGCA	660
TGTGTCCCCTG GAGCAGATCC GGGAAAGTGGA AGAGGACTTG GATGAATTGT ATGACAGTCT	720
GGAGATGTAC AACCCCAGTC GACTCGAG	748

(2) INFORMATION FOR SEQ ID NO:1193:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 227 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

GAATTGCGAA CATGGCAGCG CGTTGGCGGT TTTGGTGTGT CTCTGTGACC ATGGTGGTGG	60
CGCTGCTCAT CGTTTGCAGC GTTCCCTCAAG CCTCTGCCA AAGAAAGAAG GAGATGGTGT	120
TATCTGAAAA GGTTAGTCAG CTGATGAAAT GGACTAACAA AAGACCTGTA ATAAGAATGA	180
ATGGAGACAA GTTCCGTGCG CTTGTGAAAG CCCCACCTAA TCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1194:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

GAATTCCGGCC TTCATGGCCT AGTATATATA TAAAATACTG AGGATTTAGG GCTGATGTAT	60
ATAAATAAAA TAATGATAAC TTTTTTCCTT TCTTTTTCTT TTGAGGAGA GATAGTGCA	120
TGCTCTGTTG CCCAGGCTGG AGTACAGTGG CACCAAACCG CTAACCTGCAG CCTGCCCTC	180
CCAGGCTCAA GCAATCCTCC TGCCCTAGCA CCCTCAATAA CTGGGACCAC AATTGCATGC	240
CACCAAACGC ACCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1195:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

GAATTCCGGCC TTCATGGCCT AATGAATTCT CATTTCCTGG AGGCTGAAGA TCTGTGCAGG	60
TGCTCTGTTG CAATGTTAAC CCTACGACTT TAGATGAGCT GGCATAAATC TTGGGAGAGT	120
TTCTCTGTCT GTGTTCCCTC TGAATTCTC TGTGCTGTTA GAGGCAGGGAA CAGAAGAGAA	180
CCAGCATGGC AGTGCTGGC TCAGGGTGT GCCTGCCTGC CAGCACAGCG GTTCTTGTC	240
CTGTCCCCACA TTGCTTCTTG GAAGCCTTT TACAGCTCA ATCATCTTGC TTTTTCTACC	300
CGAGCTATCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:1196:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

GAATTCCGGCC TTCATGCCGG GACTTCCACT CTTTCTCGTT TTCTCGGAGC TCCGCCTCCA	60
GCTCCTCTAT CTTCCCTCTTC AGCTGCGTGT TCTTCTCCTC TCTGTGGATC TCACGGCCTC	120
TTCCTCTGCT CCACGCTGGC CACCGACTCC TGCAGGCCCG TGGGCAGCCG GGCCTCGCTC	180
TCCCGCCGGG TCTTGCGCTC CATCTCCAC CTCTTCCCCTG GGGCAGCTCT CTGCGTCGAG	240
GCGCCCTTCA GCTTGTGGTT CCCAGACTGC AGGTGCGTGT CAGCTGCAGC GGCGTGAGAG	300
GCCTTTCATC GTCCGTCCCG TTGACACTGG ATGCCGGAGT AGAAAGATGGG GCTCCATGCC	360
CGGATTCTCG GGATTATTAC TCCAG	385

(2) INFORMATION FOR SEQ ID NO:1197:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

GAATTGCAG TGAACCGAGA TTGTGCCATT GCACTCCAGC CTGGGAAAAA GAGCAAGACT	60
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CCATTTCAAA AAAAATACGA AGTTTTCAT TTTTCTTAAA TTTTCATTGT	120
GACTACTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA	180
TCTGCAAAGT GGTCAATTATT TATCTGCTGT CCCCTTACCT AGAGGGAAATC AAATGCGTTT	240
GATACAGGTT CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

GAATTCTGGCC TTCATGGCCT AGAGAGGCCA TCTCCATCTG CCAGCCTGG AAGCAGCCATG	60
GCAAATGGGA TGTCAGTCCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC	120
TGCAAACCCA CGTGCTGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA	180
CTGCAATGGAA TGTCAGTGTGG GTTTTTCCAC TCTCGCCAC AGTGAGTTGG CAATGCTTGG	240
CCACAGTGTGC TCTGTGGTCT TTGAACCTGA TCTGGGAGGA CAGAANTTC AAGGAAGAT	300
GAAGGGCCCA GCAAGGGAGG TATTCCTGTC TTGAGCAGAA GGTAAAGGTA GAAGGTGCAG	360
ATTAGGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATTG CAGAGGAAGA	420
GCAGTGGGGC ACAGTGGCTC CTCGAG	446

(2) INFORMATION FOR SEQ ID NO:1199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

GAATTCTGGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTAAGAA	60
CTCATACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA	120
TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCCTTTA	180
GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATTT	240
GAAAAGTGAT AGTTTATTCTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA	300
CGGTGGCACG TTTCTGGTCC CAGCTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT	360
CCGCTCGAG	369

(2) INFORMATION FOR SEQ ID NO:1200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

GAATTCTGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGGTCTCTGA AGAAGAGTTT	60
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TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA	120
AGGACCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAAGT AGGAGATGAA CAGAGAGGTG	180
AGGGAGGCTC CGTAGGTCTT AGTATGCCT TTGGCATTTA TTTACTGATT GAGATGGCAG	240
GTCATTGAG GATTCGGAGC AGAGGAAGGA TATAATCTGA CATTTCAGCA GGATCCCTTT	300
GAGTAAGTTA GCTCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG	360
AGACTATCCT TGTAAATCCAG GCAAGAGATG ATGCCAGCTT GGACCCAGGT AGTACCGATG	420
GAATTGATGA GAAGTGGTTG AAATCTGGAT ATATTTGAA GATGGAGCCC ATGGGGTCTC	480
GAG	483

(2) INFORMATION FOR SEQ ID NO:1201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

ACCATATAAT TTGCCACTTG AAGTGTACAA ATTCACTGAC TTTTAGTAAA TTCACAGTTA	60
TATATTCAAGGATATTCA GAGTTATATA TTCATCACCA CAGTCACTCT TAGAACATTT	120
TAATAACCTC AAAAAGAAAC CATGCACCTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT	180
CTACCGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:1202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

GAATTCCGCC TTCACTGGCCT ACTTTAAACA TGTGGCTTA CTGCCTGCAA ACACATACAG	60
ACTCTTAATT TTTATTACCA TAGATGTAAGA TATACACATA TATTACTCTA AAGATAAACCC	120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTTNTGTGA ATATGAATT GTACCTATAT	180
TCAGAAGAAA AGAGCAATAT TGGCACAAAAA CAAATCATCT TAATAAGGTA ACTAATTGGN	240
TGNGTGCAGT GGCTCACGCC TGTAATCGCA TCACACTCGA G	281

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

GAATTCCGCC TTCACTGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA	60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA	120
TAAATATTTC TTTGTTTCCT TTTTGACAAA ATGGATTTTC TTCAGTTCT TAAGCAGATG	180

TATTATTTCT GGGACGTTTT AGCCATGTAG TTTCTTTTA TTCCCTCTTG ATACCCGTAA	240
TAACTAGCCT TAGAACACA AGTAAAGCTC CCAAAATTTC ATTTCTACA TATTTTATTA	300
CCAGATTGAA TTCTAGACCT GCCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1204:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCCTAAA AAGAGTAAAAA GGTGAAAACA CTAAGTATA	60
TTCNAACAA AAGAAAAAGA TGAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG	120
TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGGG CTGTTTTAAA	180
CACTGACAT ACTTATTGTC TCATTTCATATA ATTGTAACAA CCCTATCAGA TAGGTACTAT	240
TTTTATCCCCTTTACAGAG GAGAAACTGA GGCACAGAAT TTTAAGTGTAT TTGGCCGGGT	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:1205:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 425 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACAA	60
CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTTAATA AAAAAAGAATA	120
CTTTGTATCT TTTGATGTA CTTCCCTTTA GAGATTCTGT TTCCCTGTC TTAAATTGTC	180
AGGCTATTTC TGATTGCTGT TAAATAATT GGTAGTTACT ATTTGAGTCA NGCTTCTAA	240
AAAAAAAAG ATATAAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG	300
ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGAGGT TTGTTCAAGT	360
CAGTACTGCC CATCTTGCA CTTAGGTTCT TGGAATACAG AGGTGGATAA GGTTTGCCCC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:1206:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 504 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCCT GCTGCGCTGC	60
TTCCAAAATG GAAAAGCATC ACAACTAAAT ACCTAATATC CTACCAAACA AACCAACAGTC	120
CCTACGTAGC CCTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCCGAG	180

GGTAGGTTGT GGATGTCTTT CTCTAGAGGG GTCCCCACACC TGGAAAAGAG GACACCCAGC	240
CCGGGGATG AGGGAAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCAG	300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGT CCAGAGAGAG TCGCACAGAA TTCTGACTC	360
ACAGGCCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA	420
GCTGCAGGAG GAGGAGGATT TGAAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC	480
TGTGCCCCC TCTAGGCCAT GAAG	504

(2) INFORMATION FOR SEQ ID NO:1207:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 242 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

GAAATTTTC AGTAACTCAG TGTCTTTAAC TAATAATTAA ATCATTTCTAG TAAGAAAACA	60
TGCTTTGTAT GATTTTAGTC TTTACATTAA TTAATTATAG TAAATTAAATA TGTTGGTTTT	120
ATGATCACCC ACGACATTGT CCTAACTTGT CGACTGTCT GTGTGCTCTT TTAAAGAAGG	180
TAGTCCTGTT GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG	240
AG	242

(2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

GTAGAATTGT ACAGTGCCTA TGAGTTATGC ATGTGTTCTT GGTCTTTGTT CTAGGATT	60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTACTTACTT TGACATTGGA GTTGACCACA	120
TGATGGTGT CCACACTTCC CCTAGGCTCG AG	152

(2) INFORMATION FOR SEQ ID NO:1209:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

GAATTGGCC TTCATGGCCT ACTACCCCTT TATCATTAC TAACGTGAAT GTGGTGTAA	60
TTTTCCAGT CCATATCTTT GAACTTTTG TAATATATGC ACATCAATAA GCAATCGAGT	120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTTGTCT	180
TGCATGGTGG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC	240
CCATTAACTA ATTTCTCAAT ACTTCTGAGT CTTCCCTGTC TATGATTCCA CTCTCTACAT	300
CACATGTACA CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:1210:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

GACAGATTTC ATTACCTTGA AGTCACACTGC ACTGAACAAT TCTCACTCTG GATGTATTCC	60
TGCTCTAGGA TGTAATTAA GACTTTGTA ATAGAGTGGG CTTTGAGAAA TAGCTTTCT	120
GCTCATTTA GTTTCATGAT GACTGCATGG AATGTTTGC TTCACGCTTA TGCAATTGAGT	180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAAACT TGAAACATTCA GTCCAAGAAA	240
AACAAAATGG ATTGAAACAT ACGTAGAACAGTAACTCG AG	282

(2) INFORMATION FOR SEQ ID NO:1211:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

GAATTGGGCC TTCAATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA	60
CGAGGGTTA CAGACATTAG CAACGGAAGC CCCGGGCTC ATCCCAAGGGT TTACTCTGG	120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAAC AATGGATCTA ACGCCACACC	180
TAGTGAAAC ACAAGTCCC CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA	240
GCAGATGCTT CAGGCTCTTG CTGGAGTAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT	300
TCAGCAACAA CTGGAACAAAC TCAGTGCAT GGGATTTTG AACCGTGAAG CAAACTTGCA	360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAAGCTATT GAAAGTTAC TGGGCTCCCA	420
GCCATCATAG CAGCATTCT GTATCTTGAA AAAATGTAAT TTATTTGAA TAACGGCTCG	480
AG	482

(2) INFORMATION FOR SEQ ID NO:1212:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

GAATTGGGCC TTCAATGGCCT AGGGTGTATAT TTAACTCGTT GCCAATGGCT AAGCTCCAGA	60
CTTTGCCTCT CACACTTGGG GGGATCCCT GCCACCATAA ATCTCGAATC TTTCTAGAGC	120
ACCAACATTGT TTCCCAAGTTA GGTAAAGATCT CATTATTCCA GGTGAGCACA CGGTTTCCAA	180
TGCTTCTCTC GACTCTGCAT CTTTCTTCCA GCTGCTCTT CCTTCTGCTGG CCTTCTTCA	240
GCTCTCGCTT TTGGCCTGA ACCACCATTT CTTCAACTG CTGTCTGTGC TTCTGAGCTT	300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGTCCTC GAG	343

(2) INFORMATION FOR SEQ ID NO:1213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

GAATTCCGCC TTCATGGCCT AGAGAAAATA AAACCTAGAG AAGTTAATTA CTGAACTCAA	60
GATCCCCAAAG TGCTGGGATT GCAGGCCTGA GCCACCGCGC CTGGCTGAAA GAGCTTTTTT	120
AATGTATTAT TTATTTGTGT CAGGATAGAC TCATTGATGC GTGTTTATT CAGTGGGTTA	180
TAATTCCTTA TTATGTATTG TGATGTTGGT GTTTCCCAAG TTTTAGCCAA TGGCATCCCC	240
TTCCATCTGG ATCCCTGTGTT CTTTGACAT GGCTCCAATC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCCGCC TTCATGGCCT AGAACCCAGGC CTTCCAGTAC GAGTTGGAG CCATGTATGC	60
ATGGATGCTG TGTGTCTTCA CTGTCATCGT GGCCTACAGC ATCACTGTC CCATCATCGC	120
GCCATTGGC CTCATCTACA TCCTGCTCAA GCACATGGTG GACCGGCACA ACCTCTACTT	180
CGTCTACCTC CCAGCCAAGC TGGAGAAGGG GATCCACTTT GCGCTGTGA ACCAGGCCTT	240
GGCAGCCCCC ATCCCTGTGCC TCTTCTGGCT CTACTTCTTT TCCTTCCTGC GCCTGGGTAT	300
GAAGGCCCCC GTCACTCGAG	320

(2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 446 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GAATTCCGCC TTCATTTGA AAGATATTTT TGAAAAATC TGTTTGTGTTT CTTTTAATAC	60
TTTCCAGTGT TATCTGGGTT TCTTAATTTC TGACTTAAGG TCTGTAATAA TTCTCTGTTT	120
CATTCCTCTT AATATATTGT GTCTTCTTT GTCTACATTT AAGATTTTAT CTTTATCACG	180
TGTTTGAAA AGTTTATTT TGATGCTCTT TTATGTTT TCTTTATTTG TAGTGTGTTG	240
ACCTTGTGGT CCTTTCTTA TTTATAATT TCATCAAATT TGGGGGGTTT GACCATTATT	300
GCTTCAAAAAA TAATCTCTGT TCTCTTCTT CACTTTCTCC AGTTACATAC TGTAGAGTAA	360
ATGATAGCTA CCGAAGACAG AGTGATCCGT GATAAAATATC ATTAATGCCT CTGAAGAGGA	420
GAATGACTCC AGTGGAACCA CTCGAG	446

(2) INFORMATION FOR SEQ ID NO:1216:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GGACTTTTG GAGAACAGT ACTATTCAATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA	60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTTTTTTT TTTTTTTTT TTTTGGGATG	120
GAGTTTCGCT CTTGTCGCCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA	180
GCTTCCTGGG TTCAAGCGAT TCTCCCTGCCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACAG	240
TACGCCGCCA TGCCCAACTC GAG	263

(2) INFORMATION FOR SEQ ID NO:1217:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

GAATTCGGCC TTCATGGCCT AAACAACAAAC AATAACAACA ACAAAAACAT GTATAACTGG	60
GAAAAAAACTG AAAGAGAAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT	120
AAAATTAGTG GAATAAGAAA TAATGGGATAA CAATGAAGAA CATAATTAGT GTAAATAGTAT	180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAAACAGGA	240
TGTAACTCAA TTCAGCATAAC TTGATGGTTG TGGTAACCCT AGAAAATGAC TCCAGGAAAT	300
AGGTGAGAAT CCATCTATC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:1218:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 293 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCTAA CTGGGTGGCA	60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGGCCTGG AAAACAGAAC TAGAATTGAA	120
ACCAACCGCGG AAGACTCATT CGAACTCGTG GGCTGAACTC AACCAAGGTCA ATGCTTCAGA	180
AAAATACCCAG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA	240
TATTAGGATA CAATCCAAAA TTGCTCATCA TAAGAAGACA GGAAAAACTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1219:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

GAATTGGCC TTCATGGCCT ACGAGGATTG GGGTAGGTAT GNGCTTNNG CTCATGTTG	60
TGATGATAAC TGAAAGTCTNT TGTGGTCCG ACCTGTTGA GGGCTGGGG GAAAGTGAAG	120
GAAGAGAATG AAAGTGAGTC CCCGCCGTTG CAAACCTTCA CCAAACACCG CGGCCAGTT	180
TTCTGAGTA CCCCTGTGTC CCAGAGAGGA GGACCCAGCG TCCTCGGCTC TGCGCAGGC	240
CTTCTTGGTC TGGTGGTAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

GAATTGGCC TTCATGGCCT AAGGAATTGA AACCCAGTAC TTTGCAGAAC TTCTTATGAC	60
TTCTGGAGTG CTCCCTCTGTG AAGGGGTCAA ATGGTTGTCA TTTCATAGCG GTTACGACTT	120
TGGCTACTTA ATCAAAATCC TAACCAACTC TAACTTGCT GAAGAAGAAC TTGACTTCTT	180
TGAGATCCTT CGATTGTTTT TTCTGTCTAT TTATGATGTG AAGTACCTCA TGAAGAGCTG	240
CAAAATCTC AAAGGGGGAT CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

GAATTGGCC TTCATGGCCT AGCTCATTCT GCTGGGGTAA GAGATGAGGG GAGGGAGTAA	60
GTAAACCTT GGACTAGCAA GTAGAACCTT GGGGGATGC GTGTGGCTCA GTTCCCTCCT	120
CCACAACTGA ATATAGTGGC TGAAACTGG GGAGATACTT GATGGCGCGA ATGTCGTTT	180
TCTCTCCCTT CCCACCTCCCT GCAGGAAGCAGA GGACGGGGCA GGCAGCACCT GTAGGCACAA	240
GTGCTTGCC CCTCCTCCCC TTCCCTTCTG GAAGTCTGG GGCCTCAGTG CTTGCAACAG	300
CCACTCCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

GCGATTGAAT	TCTAGACCTG	CTGGCCTCAA	GTGAACCTCC	CGCCTCGGCC	TCCCAACGTG	60
CTGGTATTAC	GGGCATGAGT	CATTGTGCC	AGTCACAGAA	TTCATTTAT	TTGTGAAAAT	120
ACAGTGGTAC	AAGTAGGCCT	TTGTTAAATG	ACTAACCTGA	AACTCTTGT	GAATGACAAA	180
CTCCTCTCTA	CTCCAAATAC	TGGCCCATC	CTGCTTAAT	ACTGCTCAAT	GAAGTTACTC	240
ATGCTAGTTT	TTGAGGGAGT	AACTCTAGAA	TGATTCATC	TAGGAAGACA	TAAGATAAAA	300
TGGTAAAGTAT	TCTAAGTTCT	ATAGGTAGTT	TAGTCATGCC	ATATTATAAA	CCTCCACTCC	360
AAAATAGTG	TGAGGTCATT	TCTGCCAGA	GTGAAATAAA	AAATGTATAA	TGCTGAACA	420
GTCTATTATT	CTGACAATGA	AAAAGATTAA	TGCAGTTCCC	TTTATCACTT	GCATGAGTAA	480
AAAAATATAT	ATATATATTG	GCTGGGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

GGGTGTTTCA	TACAAAGAAT	ACAAGTAAC	GATGAATGAA	GGGGGCATCT	TGTGTCCCCA	60
CAATCCTGCT	GTGCGCACAC	CACAGGTGAG	CCGTTCTGCC	TAAGGAAACA	GCCCCGGCCC	120
CTCCCTCCGG	CTCCCTCCCA	GCACCGTCTC	CTCCACCCAG	TGGCTGGCC	GTGGATGCTG	180
CCTGTGGCCC	AGCTTGAGA	CACCGCCCTG	ACACGTGTCC	AGCCTTACGT	GGAAGGATTT	240
GTCTGTTTTC	TGGCATCTTA	GTAGATGCCA	CGTTAGTAA	TGCCATGTTA	GTAGAAGGGA	300
TGTGGGCATT	TCTTTGTAAG	TTCCCAAAAG	CCTATGAGGG	TTTTTTCCAC	GATTCCGTTTC	360
CCAGTTTGCG	TTTGTTGTT	GTTGTGGCTG	TTCTTGGCCC	CCCTGGGCC	TGCAGTGGAG	420
TGGGGGGCTG	CACCTGGGAG	CCTCGAG				447

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

GAATTCCGCC	TTCATGGCCT	ACTTTGTTT	ATATAATAAA	GTATGCCGT	TATATTAAT	60
AATAAGAATA	TGGCAATTAG	CGATATAGCA	TACCCAACA	AAGATGTTCT	CGATACAGTC	120
TGGCAAAGAC	TATCCAAGG	TTATTTAAAT	GAATTCAAGAC	ATTTTTCCCT	GTGGATATTT	180
CTCCATCCTA	AAAAAAAGTGG	CAACCAAGGA	AAATATTAG	ATGCAAATAC	TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC	60
CCCTCTGCT GGCCCTCTG CTCGCGTCCT GCTCCTGTAA CAAAGCCAAC AAGCACAAAGC	120
CACCGCATCT CGAG	134

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO.1226:

GAATTGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCACCGAAG GCCTTGTTT	60
CAGACAATCT TTAAATGAT GTTGTATAG GGAACAGCTT TGGAAGATAA AGAATGTCTC	120
TCTCTCTTAT GGTTGAATG TGCTCTCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG	180
TAACAGTATT GGGAAAGTGGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA	240
TGAGTTGACT AAAGCTGATA ATGTTGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCTGA	300
TAAAAAGAAT GAGTTTGCCC AGATTGTCTC TGTCTGTCTC ATCTGCCCTGC TTCCACCTTC	360
TGTACTTCCA CCTGGAATGA CCCTCACCGG ATGCTGGTGC CATGCTCTG GACTTCCAG	420
CATCCAGAAC TTCTGTTTT ATAATTACCA CAGTCTATGG CATTCTGTTA TAGCAGCAGA	480
AAATGGACAG AGACACCCCTC AAATTAAGG ACAGTCTGC TGACTATGAA TTAGAAAATA	540
TCTGGTTAG CTCGAG	556

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGCCCA CCATAATTAC	60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAACA CAAACTACCA	120
CCTACTTCCC TCACCAAAGC CCATAAAAT AAAAATTAT AACAAACAC TCGAG	175

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTGGCC TTCATGGCCT ACTGTTCCCT TGCCCTTTC ACCGTCTGGT GGTTCCCTGC	60
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AGCCCTGGC TTGTTGGCCT CTCATCCATC TTCCGAGGC AGCACTCCAG TCTCTGCTTC	120
TGTCACTACA TCGCCCTCTC TTGAGAAAGA TCCCAGGCTG GTATTTAAAT TGCGCTGTTGG	180
CAGGAACCTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG	220

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCAGA ACATCTCTAT	60
TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGTT GGAGGTGGAC AGGCTCCTAA	120
CAAGCACTTG CCAGCAGGGG GCACTCCAG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG	180
AGGCTTCGCC ACTTTCTAAT GTTTGCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA	240
GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCAA	300
ACCAACTCCA GTAGTCTCTGG GCTGATGAAT CATCCTCTTG TGGGGCGGAG AGTGGGGGTA	360
GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT	420
CCCTCTGCC TGGAAGAAC AGAGCAGGAT TTATTATAAAC ATTTAGCTCA CTGTCCTAAC	480
GACTAAAACA AGCTCTCCCA GGGCTCGGGC CAACTGTGGA CTCGAG	526

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC	60
TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAAGACCCC	120
AGCATGATTC CAATAGAGAA GGCCCAGGGG CCCATCTGC TCATNGTTGG TCAGGATGAC	180
CATAACTGGA GAACTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA	240
AAGGAAAAAC CCCAGATCAT CTGTTACCCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC	300
TTCCCCCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC	60
CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCCTGAA TGACCGGGTA	120

ACAGATCTTG TAAACCAACA ACAAACCTG GAGGAGAAGA TGCGGGAGA CGGGGATAGC CTGGTGGAGA GACTACACCG TCAGACTGCT GACTATTCCG CATTCAAGCT GGAGGAATGAG AGGCTGAAGG CCAGCTTTGC TCCAATGGAG GACAAACTCA ACCAGGCACA CCTCGAG	180 240 297
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(2) INFORMATION FOR SEQ ID NO:1232:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 360 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCCGCC TTCATGGCCT ACGCAGCTCT ACCTGCTCCA GGGGCACCTG GACCTGTGTG AGCAGCACTG TGCCATCCTC CTGCAGACTG AGCAGAACCA TGAGACCGCT TCTGTGAAGT GGAAAACCTG AAGACATTCC TGCCCTCTTT GAATTGGCCA AGAAGGTGTC TAGCCGGTG CCTTGGAAC CAGGGTTCAA TTACTGCAGA GGTATCTACT GCTGGCACAT AGGGCAGCCC AACGAAGCCT TAAAGTTCCCT GAACAAGGCA CGCAAGGACA GCACTTGGGG CCAGAGCGCC ATCTACCACA TGGTGCAGAT CTGTCGAAT CCAGACAACG AGGTTATGGT CGGGCTCGAG	60 120 180 240 300 360
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(2) INFORMATION FOR SEQ ID NO:1233:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 423 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCCGCC TTCATGGCCT AGAAGGACTG AAATGATGTT ATACTAAGGG CTACTGAAC TTTGCCTGT TCTTCCAGG TGTGACAGCC TTTTCTTTTC TTTCCAGGTG GTTCGCTTTG AGTGGTCTG AAGCCAAGGC CTCGCGGAGC TTCTTTGTGT GTCACCTTGC TTCCACGTTT CAGTTCTGT TTGTTTCTA CTGCTTTAGT TTTTTTAAA GTTCTCCAGT GTCCCCAAGA GGTATTAGAA TCTTGTGTA CCCAAGCAAG ACGTTAATTT TTCTTTAAC TGTTTGGGG ACGGAGGGAG TGATAGCTTA ACTGCTGAAG CCAGGCGGGG GTCTGCTGGA GGATTCAC AGAGAGTATT TCCTCCACTG TACAATGTCA CAGACTATCT CTATCATCAT TGCTTTGTGG CAT	60 120 180 240 300 360 420 423
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(2) INFORMATION FOR SEQ ID NO:1234:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCCGCC TTCATGGCCT AGCATGTAAA ACTTCAGTCC TGAACATTTA TAGGGTTTTA TAGAAGGGCA TCCTCCAGGG CTGGTCCATT CAGAGAAATG CTGCATGCTG CCGTCATGGA ATGTGGCCCA CAGGACACCA GAGCCGTGAG AACCCGGAGAG CAGACTTCCC TCACGGCTGG	60 120 180
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GCTGAGCAAA CCCTCCAAAG CCCTCCTCAC GCAGTTACTA ACAATAGCAT GGGCTTACAG	240
CACAAGCAGC TGTTCCTCAC TTTTCCTAT GCCCTGGACT AAGGTTGGC CAGTGTAAATC	300
ATATAAGGCC ATCCGTACAT TGTTCTGTG TTTCAAAATT TGGATTTTA TTTACATTAG	360
AACTACATTG CTCCTAGTAG AACATTACCT TTAGGGACT AATTTTCCAT GGAGAACTAT	420
TTCAGCATAT TGCATGCTGC TCAGACCCA AGTCAGATAT GCCCACAAAGC TCGAG	475

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GTTTTGAGCC TAGTAGCACT ACCTTCCAAG TGAGTCACAA CAAATTGAT CCTATTTGGT	60
ATGTTTTGAT CCACTGTTAT GATTNATCAT GTATCTTACA AGAGCCACTC AAGCAAGACT	120
CTGCTTCTAT GTATGGTGAG GCCTNGTTGT TCTAGGCTAG AATAAACTCT TTGATGCCT	180
CATTGAATAT GCAAGGTAAA ATTATATGAG TCAAGAATGA ATTATTTTC TGACTAAAGT	240
GTGTAGCAGT AGTTCAAAAT TGTGCCCTTG TTTAACAGT TTCTGTCNAC ACCTTCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC TTCATGGCCT AAGAGAAGAT AACATTACA AGTAAACAGT AAGTGCAATT	60
GTATTTAAAT TTCTTGGTCT CCGAAAACCTC AGCTGTGACT GCTTTCATT AACAGTTCCA	120
GCTCTATGTT TTCTCTCAA CGCTAAAGGC ACAGCCCCCG GGAATCTACT GCTTCCTAAAG	180
AGTCTCCATG GAGTCTATTAA TACAACCTCC TTTCCTCCA TGCTCCCGCG GAGGAGTCTA	240
TACTATCTCT ATATACACAT TTTAAACATT ATTCTTCATT TGAAATTCCCT TCAATAAAAA	300
CACAGTCACC ATTCTTCATC TTCTTGGAA ATGGCCTGCT CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC TTCATGGCCT ACTCACTATG TTGCTCAGGC GGATGTGGAA CTCCCTGGCT	60
CAACCGATTC TCCTGCCCTG GCCCCCAG TGCTGGATT ACAGGTGTGA GTCATGGCAG	120
CCACGGCTCC AGAGCTCGGG TTCTTAATCT GGTCTGTGGA TGGCCCTGG GGGCGGTCCC	180

ATGAGCCCT CACAATTGGA CACAGTTTG CAAAGGGTA AAAGGACAAG AATCGGTAGC	240
TGTGACTGTG GATGAGCCTC TGAGCTTCAC TTTCCCTCCC TGAAAGGGGG TGACAGTGGC	300
ACCTCCCTGG AGGTTTCGT GGAGGGGAGG AAACACATGT AAAATACTTC ACCCC	355

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCCGCC AAAGAGGCCT ACTAGACCTG ATCACCACTG TCAAAAGTTG GCTTTCTCCA	60
TTTTAAGTTC TTCCTTAAAG CCTCTTTAACG CAAAGTCCCT GAAATGATAC AGTAGAAAAA	120
TCACACAGAC TTATTTAAAAA TGAATTCTAT CACTATTCCCT GAGATCTCGC CTGCCCACT	180
GAGGACATTG TTGTTTCGCA AAGTGTGTTG AAATGTGATA AAGGATCTTA AAGAATATTT	240
GTAAAATTAT GCCCAAAGAA GACATTCTTT GAGGTTAACT TGCAGTGTCT AAAAGTCAAG	300
AATGAGGAAG GAAAGGAAAAA TAACAGATTC ACTTTAAAT GGACACGCT AATTGGGCAG	360
TGAAACATCC TTGTGTCACA CCATTTACCG TAGCAGACCA GAAGAGGGAA AAGGCTTGAT	420
TTTTCTCTCA TAGATACCAC AGTTCACTCT CAAAAACATT CCTAAAATGG ATTGATATTT	480
CTCTGATAGA GCACCTGTT TGCTACTGAC AGTGTAAAGT TCCATACTAA TCAGCTCATC	540
TAGCCTAACG ACAACTCGAG	560

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGNC AAAGAGGCCT AAGGAGAANG AGGCTCAGAA GGAGACGATT AAGGATCTTC	60
CCAAGATGAA CCAGGAGCAG TTCATTGAGC TGTGCAAGAC GCTTTACAAC ATGTTCACTG	120
ANGACCCCAT GGAGCAGGAC CTGTTACACG CCATCGCCAC CGTGGCCAGC CTCCCTGCTCC	180
GCATCGGAGA GGTGGGGAG AAGTTCTCA CGCGCACAGG CAGGAAGGCC AGGGACTGTG	240
CCACTGAGGA GGACGAGCCA CCAGCACCCG AACTGCATCA GGACGCAGCC AGGGAGCTTC	300
AGCCCCCAGC TGCAAGGAGAC CCCCAGCCA AAGCAGGGGG AGACACACAC CTCGGAACAG	360
CCCCACAGGA GAGCCAGGTG GTGGTGGAGG GGGGCAGGG CGAGGGACAG GGCTCACCC	420
CCCAGCTGCT GTCTGACGAT GAAACCAAAG ACGACATGTC CATGTCTCC TACTCGGTGG	480
TCAGCACGGG CTCCCTGCAA TGTGAAGACC TTGCAGACGA CACGGTGCTG GTGGCGGGG	540
AGGCTCGAG CCCCACAGCG CGACTCGAG	569

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GAATTCCGCC	AAAGAGGCCT	AGAGACCAGC	CTGGCCAATA	CGGTGAAACC	CTGTCGCTAC	60
TAAAAATACA	AAAATTAGCC	AGGCATGGTG	GCTCACACCT	GCAGTCCTAG	CTACTTGGGA	120
GGGTGAGGCC	GGAGAATCAC	TGAAGCTTGG	GAGGCAGAGG	TTGCAGTGAG	CCAAGATTCC	180
ACCGCTTCCC	TCCAGCCTGG	ATGACAGAGT	GAGACTCCGT	CTCAAAAAAA	CAAAAAAAA	240
GTTACTCAA	TAATGTAECTT	TTTTTTTCA	AATTACAGAT	AATCTATAAG	GAATTAATCT	300
TGAAATTAAAT	TCCAGGTTTA	ATTGTTAATG	AAATTTACA	AGCCTAATT	AACACTTGTC	360
TGGATAACTC	ATTTGATAC	TGAGTAAATA	GTCACCGGTC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCCGCC	AAAGAGGCCT	AGGGCTTTG	TGAATAAATT	TTAAAGAGA	CTACTGCCTG	60
TCCTTAAATT	CCTTTTCTT	TTTATAAAAA	AAGAACTATT	AAAAATGATT	GACAAATTT	120
GAGTAAAAA	ATTGTTAAAAA	CATTCTCTAT	ATTTAATTTC	AATTTTATAA	TAGATTACAG	180
GAAGATGCTT	ATGAAACAAA	TACATTTGTT	TCAGTACATG	TCTTTAAATG	ATAGACTTAT	240
AAGTATGTA	ACAACATAT	AATAAAAGGT	TTCCAAACGC	TGCCTGTAAG	AAATCAGGCA	300
AATTTTACCA	TAAGCAATAA	ACCATTCCAA	GCCTTCCAGA	CAGTCTCCAT	AGCCGCACCA	360
GCATGGCAAT	AAGCTTTAAC	CAAACGAAAA	CAAACAAACA	AAAGCACTTC	GCAATTGTT	420
GCTGAAAC	AGGGAGAGAA	AAGAGTGTAC	AAACTTGATG	GAATCACAC	AGTCAATATA	480
ATTTAAGGGA	CAATAAAAGTC	ATAAAGTTG	ATGGTGTAA	TTGTTAAAAA	AGTTAGGCCT	540
CT						542

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCCGCC	AAAGAGGCCT	ACTGATACAA	TTGTTGACTT	TTCTTTTACT	ATGTGTAAGA	60
AATACCCCAA	ACATGAAAAG	ATTGTTTGAA	TCATATGCAT	GTATGTAGAA	TATTTTGCA	120
GAGCAGAAAG	ATTATGTTAG	AAAGTGTGATT	TTTATTTCA	GAAGTCATAT	ACATGTAAGC	180
TACAATTTG	AGTGCTTTAT	AAACACTTAA	GATATATATA	TAAATTTAA	TTTCATAGCA	240
ACTTGTAAAA	AATAAAATAC	TTGTTGAAAA	GCCTTTTCA	ACATATCCCT	AAGCTAAGGG	300
AAGAGGAAGG	AATAACAAC	CACTGAAAAG	ATGGTCTCCA	GTTTCTGAAT	AAAAAGCTA	360
CAACCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTGGCC	AAAGAGGCCT	AGCCTCATCA	CGGGCAGGGC	TCTGGCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGCTCTTG	GAAGAGGGCA	AGACCCAAA	CCAGACACAA	ATACACTTCC	AGCTCTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGGCTCCC	CCAGGGTACC	ATTTGGGAG	GGGAAATCTT	TTCTTCTTT	300
CCCCCTTAAA	AAAAAACACA	TCTGCCCCGA	ACACTTCCC	ACTGTTATTC	TTCCCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTGGCC	AAAGAGGCCT	ACACACCAAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAAATAT	CTCGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTCA	GGTCTCCCTG	GCCCTTTC	CAGCTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTCGAGGCCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCACTGA	GCAAATCATA	CAGACTTCC	TCAACATGTT	TACCAAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAAGTTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCCTCCCC	420
AGCATCATCG	CCCTGTGCTAT	GGAGCAAGTG	TATCCCCATT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AAACATCCTGG	60
CAATTCAAT	CTAGGGCACT	CCCTCTGTGT	GTCAGACCCC	CTTCGATGTC	TCAAATGTCA	120
TCTGATAACA	TTGATGAAAA	ATATCATTCA	CTTCTTCTTG	GTGCAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTC	TGGTGGCGTC	TTAACAAATT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGGA	ACATTTTAG	GGTTCTCTC	CGGAGTGGAT	300
GGCGCTGGTC	TCTTCAGGC	TCCCCCTGTA	GGTGAAAAC	TTCTTGCAGT	CTTACATTC	360
GAAGGGCTTC	TCCCCCTGTC	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 431 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

GAATTCTGGCC AAAAGAGGCCT AGTATTTGT ACTAGTTTT TAATAATTAT AAGTCCTACA	60
CGTTCTCAA TTCTTCTTGA ATCTGTTAA TTTTCTCCC TTGGGAATTG TTAAGTGTAC	120
ATGTATTGTG ATAAGTGTA TAATTTGGCT TTTATTGATT TTTTTTGCTT TATATCTGCT	180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTGTC TGGGGATCT	240
AATAGCAGGT GTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAAT GCCTCACTG	300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTTCCA AGACAGTGG TTGTTAAAAA	360
GAGCCTAGTG CCACTTCTCT CTTGCTTCCT TTCTTGCCGT GTGATCTCTG CACATGCCAG	420
CTCCCTCGA G	431

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

GAATTCTGGCC AAAAGAGGCCT ATTTTTTTT TTTTTTTTT TTTTTTTTT TCNGGGTGT	60
GAACATTTAT TTATTTTTC CACAAATCAC TGAAAGTTA GGTCAGTGG AAATAATT	120
AATCAAATAA TTGACATAT TCTTCCCACA TATCCTGCT TGTATTAGGA AATGACATTG	180
TGATCCATT CATTACAAGT AAAATATTAC AAAATATTAA CAGGAAAATA TTAAAATAA	240
CTAAACACAA AAAGCAAGA TGAAATAAAC TGTTTTTTT TCTCCAGAAA TCTCTACTCC	300
AGTGCCACAA GCACACAAGA GTCAAAACAA ATAAGCAACT AAGATCCCC GATCACAAAT	360
TTCAAAGAA CTAGGCCTCT TTGGCCGAA	389

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

GAATTCTGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TTCTGAAGTT	60
TAGAATTGGA ATTACTTCCT TACTAGTGTCT TTTGGCTTA AATTTTGCTCT TTTGAAGTTG	120
AATGCTTAAT CCCGGAAAG AGGAACAGGA GTGCCAGACT CCTGGCTTTT CCAGTTAGA	180
AAAGGCTCTG TGCCAAAGGAG GGACCACAGG AGCTGGGACC TGCTGCCCC TGTCTTTCC	240
CCTTGGTTTT GTGTTACAAG AGTGTGTTGGA GACAGTTCA GATGATTATT TAATTTGAA	300
ATATTGTACA AATTTAATA GCTTAAATTG TATATACAGC CAAATAAAAA CTTGCATTAA	360
CTTAGGCCTC TTGGCCGAA	380

(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

GAATTCCGCC AAAGAGGCCT GTTTGGTTG TGACTAGACT TAAAAATACT AAAATAAGCC	60
AAATAGATGC TAACAATACT AATTTGCACA CAAGATTGAA AAAAAGTACT TCAAGTTTA	120
TCTCTTATCC CTAGAGAAG TAAATAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA	180
ACCAACAAAC AAAACTAACT ATATAAGAG CTGTTTTCT TTTTGAATAC TTCAATTGGT	240
CCTATATTAG GATAAGGTT TGATAGCAAG GACTTCCTAG CTTCTTCCCTT TATCTTCCAT	300
TCTCTAGTC CTCCGTGTT TTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC	360
AGATTGAATT CTACCACCCCT CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 428 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

GAATTCCGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG	60
AGTAGTCGCA TTGATGATCT GGAAAAGAAC ATCGCGGAC TCATGACACA GGCTGGGTG	120
GAAGAACTGG AAAGTGAAGA CAAGATACCT GCCACGCAA AGAGTTGAAG GTTGCATAATA	180
ATTATATACTG GAATCTGGCA TTTTTCCAAG CCAAGAGAAC ATCGAATGGC TTTTTGCAGC	240
TAACTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA	300
TAGTTAGTTT GTAGAGTGTAT TTCCCCCAG TTTCTTGAAAC ATGGTATCTT CACATCTTGG	360
ACCTTGCTCA GTTGTGCTAT TCATTATTAA ACACTAAAC TTTGGCGTT TAGGCCTTTC	420
TGGCCGAA	428

(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

GAATTCCGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTTCTAC ATATTAACCA	60
CAATTTATGG TAATTGTGA AATGTTTTTC CATTTTAAA TGTAAGAGTC TCTATCTCCA	120
CTCACAAAGC AACAGGCACT GCTAGGGTCA TTAGGCTAAC ATCTGCCACC CCACCAAGTCT	180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CGCGAGAAC	240
CAACTCTAGG CCTCTTTGGC CGAA	264

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

GAATTGGGCC	AAAGAGGCCT	ACTTTTTT	TAATTTCCA	CTTTCTTC	AACTTACTT	60
CTCTTTTGT	CCCCCCCAT	CITACAGAACG	TTGAGGCCAA	GGGAGAATGG	TAGGCACAGA	120
AGAAACATGG	CAAACATGCTC	TGTGCTTC	AACCAAAGTG	TTCCCCCAA	CCCCAAATT	180
GTCTAACGAC	TGGCCAGTCT	GTTGTTGGCA	TTGTTTCTA	CAACCAAATC	TGGGTTTTT	240
TCTTCTTCT	TTAAACATAG	AGGTACCACC	ACAAGGGATG	CCCTACTCTC	TCGCAGCTCT	300
TGAAAGCATC	TGGTTGAGGG	AAAGGTCTCT	GGGCAAGCAA	GTGGTTATT	GGATTGCTTG	360
CTTCCCTTTT	TCCACCTGGG	ACATTGCAAT	CATAAAATAA	CAGTAAATTC	CAAACCTCTA	420
GGCCTCTTTG	GCCGAA					436

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

GAATTGGGCC	AAAGAGGCCT	AGGGTAGATC	ACTTGATATC	AGGAGTCGAG	GCGGGAAGAT	60
CACTTGACGT	CAGGAGTCG	AGACTGGCCC	GGCCAACATG	GTGAAACCGC	ATCTCCACTA	120
AAAATACAAA	ATTAGCCTG	GTTGTTGGGT	GGGCACCTGT	AATCCCAGTG	ACTTGGGAGG	180
CTAAGGCAGG	AGAATTTCTT	GAACCCAGGA	GGCAGAGGTT	GCAGTGACCA	GCAAGGTTGC	240
GCCATTGAC	CCCAAGCCTG	GCGATAAGAG	TGAAAACTCC	ATCTAAAAAA	AAAAAAAAAA	300
AAATTCCCTT	GGGAAGGCCT	TCTACATAAA	AATCTCAAC	ATGAGACTGG	AAAAAAGGTT	360
ATGGGATCAT	CACCGGACCT	TTGGCTTTA	CAGCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 444 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTGGGCC	AAAGAGGCCT	ACCCGGTACT	TACTTCTCAA	TCCTAAAGAG	AGAAAACAGG	60
TGTTTGATCA	GTATGTAAAG	ACCAGGGCAG	AGGAAGAACG	CAGGGAAAAG	AAAATAAAA	120
ATGCAAGCCA	AGGAAGATT	CAAAAAATG	ATGGAAGAACG	CAAAATTAA	TCCAAGAGCA	180
ACTTTTAGTG	ATTTCGAGC	CAAGCATGCT	AAAGATTCAA	GATTCAAAGC	AATTGAAAAG	240
ATGAAAGACC	GAGAAAGCCTT	GTTTAATGAG	TTTGTGCCG	CTGCTAGGAA	GAAAGAGAAA	300
GAAGATTGCA	AGACCAGAGG	TGAGAAGGTA	AGATGGTTT	AGTTCCAGTG	GTGTGATTGA	360
TGGGAGTGTG	AATGGGAAAG	GTCTATGCTG	GTGTTATGTT	TCTAACCTTA	TTCAATTGGCA	420
TAAATAATAG	GACGTACACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTGGCC TTCATGGCCT AAGAAGGACT ACCCTGCACT GCTTCCTTG GATGAGAATG	60
AACTGAAGA GCAGTTTGTG AAAGGACACG GTCCAGGGG CCAGGCAACC AACAAAACCA	120
GCAACTGCGT GGTGNTGAAG CACATCCCCT CAGGCATCGT TGAAAGTGC CATCAGACAA	180
GATCAGTTGA TCAGAACAGA AAGCTAGCTC GGAAAATCCT ACAAGAGAAA GTAGATGTTT	240
TCTACAATGG TGAAAACAGT CCTGTTCAC AAGACAACT CGAG	284

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTGGCC TTCATGGCCT AGTGGGAGTT TGCTAATGTG AAACCTAATG ATGCTGAAA	60
ATGGTCTGA TGGGTATTAA TAGCCATCTG GAAAAATTAA ACATCTTCAC AAATAATCCC	120
AATAATTAT ATTGTGAAGA TATTATCCTG ATAGTCCTTC TTTCTCTATA TTCTTGTGCGG	180
CTGTAGGATG AGAGCAGTAT GAAGCAAACA GAAGACATTT TGAAATTAAAT CACAAAATTC	240
CCATTGCTT GAAGCCTGCT ATTATTATAC TAAGCCTCT TATAGCTTTA AAAATCAAAC	300
AATGCCAAC AGTATATCTA ACATTTTAA TTTCTTTGA GCCAAACAA TTTGGTTTAA	360
ATTTCTCTGC CTCCGTGAAG ACAAGCTGGG CTGGGGAGGA CGGTGCTAG GACGGATGAC	420
CCCACTCAGC TCCAGGCAGT GTTCTGCCGA GACCCCCAAGA ACTCGGGGTG TCAGAGGGCA	480
AAGGAACATAC CTGCCTTCA CGGCTGCTGA CTTCTCAGGG CTGCAAGCAG CACAGAATGT	540
TATCCCTTACG TCTGAGGCCG GTTTAAGTCT GTGGAAAAGG AAGCACGGGA GAAATCCACG	600
TAACCTTTGC TTCTTTTA AGGGAAGCGG TTCCGCGGTG AACTTGGAAC CCTCAGCTCC	660
GGGTGTTCTC GGCAGAAGGG CAGCTCTCGA G	691

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTGGCC TTCATGGCCT AAGCTGATCC ACGATCAGAG TGCTCCAGC TGCCCCAGCA	60
GCTCCCGTC CCCAGGGGAG GAGCCTGAGG GGGAGGGGA GACAGATCCG GAGAAGGTGC	120
ATCTCACCTG GACCAAGGAC AAGTCGGTGG CAGAGAAGAA TAAGGGCCCC AGTCCTGTCT	180
CCTCTGAGGG CATCAAGGAC TTCTTCAGCA TGAAGCCGGA GTGGGAGAAC TTGAACCAAGT	240

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTCATCGTG AAGAAATCCC	300
GGGACGCAA GCTTGTGTTG CTCAACATGC CTGGCCCTCC CCGCAACCGC AATGCTGATG	360
AAAATACAT GGAGTTCTC GAG	383

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGACTAACTA CGACCATGAG ATTGGCAGTG ATTTGCTTT GCCTATTGG	60
CATTGCCCTC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT	120
TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA	180
GAATCTCCCT GGCACACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA	240
AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACTGAG GACGACGATG ATGACGATGA	300
TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA	360
ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAAG CAGTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGAGGC AGGTTCTTGC	60
TCTGTCACCC AGGCTGGACT GCAACAGCAT GATCTGGCT CACCTCCGCC TCCCAGGCTC	120
TGGCAATCTT CCCACCTCAG CCTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC	180
CCACTCGAG	189

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTAA GAAATTCCCT AAGTTTCTT	60
TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAATTG	120
TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTTGTTTC	180
TGGGACAAGG TCTTGTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC	240
CTCAACCTCC CGGACTCAAG CGATCCCCCC CCCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCCGGCC	TTCATGGCCT	ACTCACTGGA	TGCTGGGGGA	GGGCCCTCA	GGTGAGCAGC	60
CCACCACTGA	CTTCAGCGTT	GCTGGCTCGG	TTATCAGACT	CTCATCCAAC	ACAAGCTCAC	120
AGGGAAAGCC	GTTCCTTGCT	CCTTGTGGAG	GGAGCTACCG	TCATTGCCCT	GAGACCACCA	180
GCCAAGAAAG	TAGTATGTC	CAGGTAGGGAA	ATTCAAGAGGG	ACCCAGTGCA	TCCAATTATA	240
CAATTATACC	CAGAAAGTCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GGTCAGTATT	GAAGGTTGTT	TTCTGAGCCA	TTGTATGAAG	CTGCTGTTT	GGCGTCCCTA	60
ATGCAGGGTG	AGATGGTAGT	GTGATTCTTG	TTGTGACATC	TCGTGACTGG	GCAGGACGCT	120
GAATACTGAT	TGCTGCAGAT	GGAGGGATGCT	GGATAGACAA	GGTTGCCCTA	CTAAGTGTG	180
AATCAGTAGC	ATGCGCCGCT	GTCGTAGTGA	TGACTGGAGA	CTGAGCTCTG	GTGGCTGAGA	240
CAGTTGCTAC	CACAGCAGGA	GGGATGGCAT	TGGAGGTGGT	CACAGGTGGC	CGAGACTGGA	300
TTGGTTGGTG	AATGATGTG	TGTACTGCTG	GCTGAGCAGT	AGCAGCATT	GGCAGCTGTG	360
AGGTCCGGCCT	CAGGACTGTG	GTTACTTTAG	AACTGGACAT	CACAGCAGCA	GCAGCTGCAC	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 398 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCCGGCC	TTCATGGCCT	AGGCCGGTGT	TTATGCACGA	TGGCGTTGAA	AGCTAGTCCA	60
TCTCTCCAGC	GGTGGCTGAA	GTGTTGACA	TTGACGTTGG	GATAACCTGC	AGCTTTCATC	120
TGGCACCACA	GAAGCAGGGC	ATCCTTGGCT	GACTTCTTCT	CCTTGTGTC	TTCTGTCTCC	180
ACACTGATGT	CTTGGATCTG	GAATCGAAGG	ATGATGGTCC	AGACCAGCCC	AAGGGTCAGT	240
CGGTGGTTTC	CGTCCACAAAT	GTCATGGGAG	CCCATGTTT	CCAAGTGCAC	TTTCTGCTCC	300
TTGAGGAAC	GCAGTGCCTT	GTCCACGTC	TCCAGGCAGT	GGATCCGCAT	GGGCCCTTT	360
GTAGGCTTTG	GCAGTATCTC	TCCCGAGAGC	ACCTCGAG			398

(2) INFORMATION FOR SEQ ID NO:1264:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCCGCC TTCATGGCCT	AAAAAAAGCT GTTAAGAAAA	TATGTTTAA AAATTTGCC	60
AACAGGAAGG AGAAAATTAG	AATCTAATAG CAAACTTGTG	TCAAAGCAGG GGAGACCACA	120
TGATCTTCCT CTTTGAAT	CTGTCCTGG TGATGACCAT	ATGCTCTCTAACAGGTTT	180
CTGTGTTTA GGGAAAGAAG	CTCAGAAAGG ACCCCTGCTC	TTTGATGACC TCCCCTCCGGC	240
CAGCAGTAAC CTCGAG			256

(2) INFORMATION FOR SEQ ID NO:1265:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 249 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCCGCC TTCATGGCCT	ACAGAGTCTA ATTAGCCATA	TTTATATGAT AATAATAAAC	60
ATTTGGCTA CAGCCTTAC	TAGATTTTTT TTTTTAGAT	GGAGTCTTGC TCTGTCGCC	120
AGGCTAGAGT GCAGTGGTGC	GATCTTGGCT CACTGCACT	TCTGCTCTCCC AGGTTCAAGC	180
AACTCTGTTG CCTCAGCCTC	CCAAGTAGCT GGGATTACAA	GCGCACATGA CCACGCCTGG	240
CAGCTCGAG			249

(2) INFORMATION FOR SEQ ID NO:1266:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

GAATTCCGCC TTCATGGCCT	AGGTTATATA GCAGTGATGC	TTTCATAGTA TTTTCTTGA	60
ATAAGGTCCC CAAACCTTA	TTAAGTCTCT GGTAGGCATG	GAGCATTGAA GATGGCAGAC	120
ATGGTGCAGT CTCTCAAGGA	GTTCAGCTC TAGTGGAA	AAACATCAGA CAGCCTTAAA	180
ATACATGTAT GGCTACTATA	ATAAAATACG TGAAGCAGGA	GTGCACCAACG AACACCTGGAG	240
TCCTCTCCAT CCTCCCCCTTC	TCGAG		265

(2) INFORMATION FOR SEQ ID NO:1267:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 293 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCCGCC TTCATGGCCT ACTAGACCTG CCTCGAGATT AGGGGGTTA GACTCAGAAT	60
TCTGTCCAAA CTCCCTGGACG ACCTCTTGAATTAAGTCAG GGATTTATG TACTGGGTTA	120
ATTCGTAAC CTCTGGGTAT AATATTAGGT TTGCATGTAG AAAGGGCTCAGTATAGGA	180
CTTCAAAGAA ACTAACGAT AGACGTAATT TAAGGGCTGT TCTGATCTGA AGAAGTGCCA	240
TGGGTAGAAG TTTTAGCCAT GGTAAGAGG CTTCTGGCA TCATTGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCCGCC TCATGGCCTA CTGGTCCAAG CTGATTACCC TCATAGTGTGTC CATCATTGAG	60
GAAGACAAGA ATTCCTACAC TCCCCTGCCCT AACCAAGTTTCCCACGGAGCT GAATGTGGGT	120
AAAATCAGCG CTGAAGTGTGAT GTGAATCTG TTTGCCAAG ACATGAAGTA CGCCATGGAG	180
GAGCACGACA AGCATCGTCT ATGCAAGAGT GCCGACTACA TGAAACCTCCA CTTCAGGTG	240
AAATGGCTCT ACAATGAGTA TGIGACGGAA CTTCCCGCT TCAAGGACCG CGTGCCTGAG	300
TACCCCTGCAT GGTTGAAACC CTTCGTCATC CAGTGGCTGG ATGAGAATGA GGAGGTGTCC	360
CGGGATTTC CCGACGGTGC CCTGGAGCGA GACAAGAAGG ATGGGTCCA GCAGACCTCA	420
GAGCATGCCCT TATTCTCTG CTCCGTGGTG GATGTTCTCT CCCAACTCAA CCAGAGCTTT	480
GAAATCATCA AGAAACTCGA G	501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCCGCC TTCATGGCCT AGGCCCTGTC TCCACCTGGG GGGACTGGGA GTGTGAGTGT	60
GCATGGCATG TGTGTGGCAC AGATGGCTGG GACGGGTGAC AGTGTGAGTG CATGTGTGCA	120
TGCATGTGTG TATGTGTGTG TGTGTGTGGC ATGCGCTGAC AAATGTGTCC TTGATCCACA	180
CTGCTCCTGG CAGAGTGACT AACCCAAAGG CCCCTCGGC CTCCCTGTAG CTGTTTCTT	240
TCCCTTTGTT GTGGTTTTA AAATACATTC ACACACAAAT ACAAAATTGAC AGGTCAAAAT	300
CCATGAAATG AGATCCCCCA CGGGCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

GAATTCCGCC	TTCATGGCCT	AAAAAAAAAA	TACTGATTCA	CTTTGCAAT	TTTCAGATA	60
CTACTTGATG	TGACACCTCC	CCTAGGCTTG	CTGTGGTCT	CTTGGAAAGAT	AGAGCTATAT	120
TAACCTCTG	ACTTAAAGGG	CAGCAGACTA	TATAAGGTCT	CTTTACAGAC	AGAGTAGGGA	180
GAATAATGAA	AACTTTTG	ATTTCTAGAG	AGAAGAGAGA	AGACATAGCA	ATGGAACGTGT	240
TCTTAGCTTT	GTTTGCTACA	ACTCTTCAAA	GTTTAATTTC	AGATTCAGT	CATTATTCA	300
TAGAGCATGA	AACATATAAT	CATGCCCTTT	ACTAATTGCG	GATACTAAA	ATTATATATT	360
TTTGACCTAC	TGTGTTATGG	TCATTGAA	AAAGAATGGT	TTGATTATAT	ATTATTGTCT	420
GTAGATTCCC	TGTACTATTC	TAGGATCATA	TGACATATTAA	TCATTACTAA	ATATAGCACT	480
AATTATTGAT	GCTCCGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

GAATTCCGCC	TTCATGGCCT	ACCCCTGACT	ATTCAGT ^{AGG}	AGAAGAAATC	AAAAATCCAT	60
TCTTTCTCC	TTCTCTCCCT	CCAACAGTGG	CCAGGGGAAG	GGGAAGT ^{GAG}	GGCAGGGGCA	120
AAAAGATTIG	GGAATTTTTA	TTTATTATT	TATTGT ^{GACT}	TTTCATTTT	TTGGTATTG	180
GCTTTACTGG	AATAGGAGGG	CCCCCTGCCA	CTGTGCCCCG	TTTATCCCTT	ATTCCCCAAA	240
CCCTGCTCTC	CCCAACACCT	ACTCACTTAA	GCAC ^{TG} T ^{CC}	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

GAATTCTAGA	CCTGCCTCCA	ATTTGAAGAT	TTATTTCTCT	CTTTGGATAT	AGAACAAAAT	60
AACTTTATGT	ACATTTTATT	TCAC ^{TTT} TATT	TTACTATTGG	GTGGTGCAA	AACAAATT ^{GC}	120
AGTTTTCCA	TGAAAGTAA	TGGCAAAAC	TGCAATTACT	TC ^{TG} CACCAG	CCCAATATT	180
TATTTGAGA	CAGAGTCGCA	CTCTGTCACC	AAGGCTGGAG	TGCAGTGGTG	TCATCCCAAC	240
TCAC ^T ACAGC	CTCTGCCTCC	TGGGTTGGAG	AGATTCTGT	GC ^G TCAGCTT	CATGTGTAA	300
TGGAATTACA	GGTGCACGCC	ACCACGCCA	GCTAATT ^{TTT}	GTATT ^{TTT} TG	TAGAGATGGG	360
GTTCGCCAT	GT ^T GCCCTGG	CTGTTCTCAA	ACTCCTGACC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 412 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

GGCGATTGAAT	TCTAGACCTG	GCTCGAGGC	GGTCTAGAAT	TCATCGGCT	TCCTGGCAGT	60
GCCCTCTCCC	AGATGAGACC	TGATCTCTTT	TTTGTGTTT	TTTTTTGTT	TTGAGACAGA	120
GTTTGCTCT	TCTTGCCCCAG	GCTGCAGTGA	GTTGAGATCG	CACCACTGCA	CTCCAGCCTG	180
GGTGACAGAG	TGAGACCCCA	TCTCAAAAAA	AAAAAAAAAA	ATCTGCCCTT	ATGGACTGTG	240
TACTACACTC	TAGTGGGGGT	AAGAGGCAAT	GGGTAAATAG	GTAAGTAGAT	TATTGGATGT	300
ATTAGAAGGG	GCATGGGAA	TGTGGGGTCA	AGGTTATAGT	TTTAAATAGG	GTGGTCAGGG	360
AAAGCTTCT	GAGAAGGTGA	CATTGAAAC	AAATACTTGA	AGGAGTCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

GAATTCTGGCC	TTCATGGCCT	AGCTATTTTT	AAACAATATC	TGAGATTATT	CATTCAACTA	60
AAACCTTATTA	AGCATTAAAT	ATCTGTCG	CATTCTTCAG	GCACCAAGGA	TATTTCGTTG	120
AAACAAAACAA	AATCTTTGTC	ACTATGGAGT	TTACGTTTG	TGGTGGCATT	GGAGTGAAGA	180
GCTAGGGAAT	AAAAAAACAA	GTCATAATGT	AGTATGCCAC	TTGGTGGTAA	GTCATTGGA	240
GAATGATGTA	GTAGGGAAAG	AGGAAAGGG	TGTAGGCATC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCTGGCC	TTCATGGCCT	ACTCCACACA	TTCATCTCCC	AAAGGACTCC	TTGAATATTT	60
GCCCCAAAC	ATCAGCTCCC	AGAAACACCC	CCTCCAGTC	ACACACACAC	CCAAATTCTC	120
CGATGTATTT	TCATTTTTTT	TCTCTCTTC	TCTTCTCTTT	TTCCTCCCTT	CCTTCTCTCT	180
TTTCTCTCTT	TCCATCCCTC	CCTTCCTTC	TCCCTCCCTT	CCTTCCTCCC	TCCCTCCCTT	240
CCTCCCTCCC	TCCCTCCCTT	CCTCCCCCA	CCCACTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCTGGCC	TTCATGGCCT	ACGAGTGGTG	CGATTTTTT	TTCTTAGCTT	ATCAGCTATG	60
GTTAGTGT	TA GCGTATTTA	TGTGGGCC	AAGACAATTC	TTCCTCTCC	AGTGTGGCCC	120
AGAAAGCCA	AAAGATTGGA	CACCCCTGGT	AGAGGCAGAA	ACTCACTGGG	TTAGTTCCAC	180
AGCATCTGAT	CAAAGATATG	AGGCCAAAGA	GCCTCTCGAG			220

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCTGGCC	TTCATGGCCT	ACGAGCTGAG	ATTGCGCAC	TGCACTCCAG	CCTAGGCAAT	60
AGAGTAAGAC	TCCATTCAA	AAAAAAAAAA	AAATGTTGAT	AAAAAGAACG	CAGATGACAG	120
AGTACTCACT	GTTGAGTCC	ATTATTTGA	AATTCTAGAA	AAAAAATAA	ATATCCATTG	180
ATAGAAATGG	GAACAGTGT	GGCTATGAA	GAATGAAAT	TGACTGGAAG	GAGGCCCTTG	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

GAATTCTGGCC	TTCATGGCCT	AGCTGGGCGT	GATGGCGGCC	GCCTGTAGTC	CCAGCCACTC	60
GGGAGGCTGA	GGCAGGAGAA	TGGCGTGAAC	CCGGGAGCG	GAGCTTGCAG	TGAGCCAAGA	120
TTGCGCCACT	GCACTCCCGC	CTGGGCCACA	GAGAGAGACT	CCATCTNAA	AAAAAAGAAA	180
GAAAGAAAAA	AAAGAAATAA	ACAAAGAAAA	AATTAAGATT	TTTGAATATAA	AAACAAATAT	240
TAAGAAATTAT	TGAAATATAT	TGAAAGTTT	TTCACCATAT	ATATTTACCT	TTTAAAGGAA	300
TATGATTCA	ATTATTTAT	TTGCTTATGG	AAAATAGATC	CACTGCTCTA	AGATGCTACT	360
AATCATGCTC	AGAGGATTCA	CAACAAACAG	ACTGATAAGG	TATTAACCTAA	AGCGCTCTAC	420
ATTAATATAGA	GCATTCCAGT	TTCTAGGGC	ACACTACTTG	CTGTATTCC	AAGGTCAAGC	480
AAAATAGCTT	TCGTTCGAG					499

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCCGCC TTCATGGCCT AATGAGCTAA AAGCAGTGTCA ATCTCCGCAT GTGGAGCAG	60
CCAAGAAATA GTTTGGTACT ACCGACATTG TCTAATCCAT GTCACATCCT CATAAACATT	120
AATTGCTCAA CCATGCATTT AAAACTCCTC AAGAAAGGAT TGGTACTGCA ACTGTAGGTA	180
AACTGAAAAA AAATAAGAAA GAAAGACTTG GATGAAAATG TGAAAGCCCA AGTTAGATG	240
TGCATTAAGT ATTAATAGC ACAGTATCTT CTTCATGGAG CCTTTTTCC TCCCCATCC	300
CCTGCAGCTA CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCCGCC TTCATGGCCT ACTTCCTTTC ATTTGAAGC AACAGTTAT AAACAGGAAA	60
GTC TACTGGT TTCATAGAAT CTGTCAGATT TGCTTATTTG CTACTGGTTT CACCGCGGTG	120
GACTATATTC CAGTGTTC AGTCAAAGAC CTTTATCCTC AAATCATGAG ATTAGAGTAA	180
AACAACGCT GTAAAGGTTGA GCATTTCATG ACCAATGAT ATGAAGGCAAC ATTACACAAA	240
CACAGGCACT TAAAGGGCAT CCTTGATTAA TTGCTAATT GCTATTGTTT GTGGTATGT	300
GAATTCCCTGC TAGGAGGCCG AGGCTAGTAG GCAATGAAAA AGACAGAACATGGTAAAAT	360
GCAGCCCCGG TCCTCTACAA ATTGACAGTA TAATTTAGGG GCTCGAG	407

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

GAATTCCGCC TTCATGGCCT AAGATTGACA AAGAAATAGA GCTTCACAGA ATTCTTCATC	60
ATAAGCATGT AGTGAGTTC TACCAACTCT TCGAGGACAA AGAAAACATT TACATTCTCT	120
TGGAATACTG CAGTAGAAGG TCAATGGCTC ATATTTGAA AGCAAGAAAG GTGTTGACAG	180
AGCCAGAACT CGTACTAC CTCAGGCAGA TTGTGTCGG ACTGAAATAC CTTCATGAAC	240
AAGAAATCTT GCACAGAGAT CTCAAACCTAG GGAACCTCGA G	281

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

GAATTGGCC TTCATGGCCT AGTAGTTAT TATATAGAAA TTATTTGTC TTGTCTTAGT	60
TGTGCCCTT GACTCAGCAA TTCCCTTCT ATAAAATTT CCCAAGCAGA TGATTATGGA	120
TATATGCACC AATTTGGAAA CAGGGATGTT TATTGTTAT AGTAGCACTC AACTGAAAAAC	180
AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAAATTATG ACATGAAGCA GAATAATGCA	240
AAATCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:1283:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

GAATTGGCC TTCATGGCCT AGCTGAAGAAA GGCCCTCACAGAGCTCAAG CCAAAGTTAT	60
TGACACTCAA CAGAAGGTGA AGCTCGAGA CATAACAGATT GAACAGCTAA ACAGAACGAA	120
AAACCATGCA CATCTTACAG ATACAGAGAT CATGACTTGTG GTAGATGAGA CTAACATGTA	180
TGAAGGTGTA GGAAGAATGT TTATTCTTCAGA GTCCAAGGAA GCAATTCAAGA GTCAGCTGTT	240
AGAGAACGAG TCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1284:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 434 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

GAATTGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC	60
TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTTA CCTTTTAACC TTTAGAGGAG	120
GAAAGGTATT TCTCTGCAAG ATTTCTGGGG CTATCGTTTC TTAACCGATA AGAACCCACT	180
CCTTTATCAA TAAAGATGAA AATCCGAAAT TTGCATTAGT GAATGGGACT GATTATTATA	240
TAGTTAACCA GCACTCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCCTAATA	300
GCTACAAAAC TGTAAGTTTG ATCCATGTGG AAATTGGTAA CATTATTATG TAATTAGTGA	360
TAACATTAAT AGTGTAGAAT ATTTAGATGT AAATTGCAAGA TGCAAAATGTG ATTTACCTGAG	420
GCCAAAAACT CGAG	434

(2) INFORMATION FOR SEQ ID NO:1285:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 302 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

AGCAATATTT ATTTTAGACA GACTTCTGGG TTATGACCCG GCTGCTGGGC TACGTGGACC	60
CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGAA	120

ATGTGGTTGC ACGATGGGAA CACAAGACCC GCAAGCTGAG CAGGGCCTTC GGATCCCCCT	180
ACCTGGCCTG CTACTCTCTA AGCATCACCA TCCTGCTCCT GAACCTCCTG CGCTCGCACT	240
GCTTCACGCA GGCCATGCTG AGCCAGCCCA GGATGGAGAG CCTGGACACC CCCGCACTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

GAATTCCGCC TTCATGGCCT AATCTTTCT AATTTGTCTT AATGCTTTAT AATTTTCTAT	60
GCAGAGGTCT TGTAGATCTC TTTCCAAGAT ATTTGATGTT TGTGTTGTTG TTTGTTGTT	120
TGTTTTTGAGA GACGGAGTCT CACTCTGTTG CCCAGGCTGG AGTGCAGTGG CGTGATCTTG	180
GCTCACTGCA ACCTCCGCCCT CCTGGGTTCA AGCAATTCTC CTGGCTCAGC CTCCCAAGTC	240
TCGAG	245

(2) INFORMATION FOR SEQ ID NO:1287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

GAATTCCGCC TTCATGGCCT AATTTTTTTT CTCCCTTTTC TTCTAGTACA TATTGATAGG	60
TATAACATAA TTAAGGTTTA AAAAAAAATTA GACATAGTTA TTCAAGATTTA GGACCAAGTAA	120
GGATAGAACT TTCTCTTATT TATGAAAAAA AATGCTAATA ATTTGGGGC AGTTTTTCC	180
TTTAATTATT TTTTCAATT TCAAGTTAA TTTTATTATA GCTGATCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCCGCC TTCATGGCCT ATAGGCCATG AAGGCCCT TCATGCCCTA AGAACATCAC	60
TTGAATCTGA GAGGTAGAGG CTGCACTGAG CGAACATCAC ACCACTGGAC TCCAGCCTGG	120
GCAACAGAGT GAGACCCCTGT CTCAAAAACA AAGAACAGCA CTAGCTCTC TATCAAGTAA	180
GTGTAGGGTT TAAAAAAACA CAAATGGACT TTGGTAGACC AAAACAAAAG CCCACGAGTA	240
TGGAAGTTTC CCTTGAAAGTT GGAAATTCAA TTTCCCCCTT ACCCCCCCAA CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1289:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA	60
CGGCCTTCGT CATCAGAAC ATCGGCCACA TCCGCCGCA GAGGACCATT CTGGCTTTG	120
TCTCTGGCAT CTTCATTCATA CTATCGGGCC TCTCCTTGTT GGTCGGCTTG GTTCTTTACA	180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1290:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

GAATTGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTGGTT TTGAGCTGGA	60
AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC	120
CAGAATCTAC CCTCCGTGCA CTAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC	180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAGAAAGA	240
AAGCTTCTAA TGGAAATACT CGAG	264

(2) INFORMATION FOR SEQ ID NO:1291:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

GAATTGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAA	60
CTTGAATTAA AACATGCAT CTATTATTTC TGTTTTTGT TTTTGTGTTT GAGGCAAAGT	120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC	180
CCCCGGGTT CAAGCAATT TCCTGCTCA GTCTACCTAG TGGCTGGAT TACAGGCGCC	240
CGCCACCAAG CCCAGGTAAT TTTTGTGTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC	300
AGGCTGGTCT AGAATTCAAT CGG	323

(2) INFORMATION FOR SEQ ID NO:1292:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA CTTCTGCTGC ACGTGCCTCT TCCCTCCAC CTTCACCCCT TGTGGCTCAC	60
TCACGCACCC ACTCTCCAGT CCACCCCTCC TCAGAGACCC TGTCCACTCA TCCATCTCTC	120
TCCCATTGCG CTTCTCTTC ACTCCGTTCC TTCTGCCTCC CACCATATGC AAATCTTCTC	180
CATCCTTAAA AGCCTGATTG CCTCCTCTGG ATTTTCCAC ACTCTTGGGG AACTCCCTGT	240
GACTCCCTGC CCTTCACAC CAGCCTTCC CAAAGAGAAA TCCCTCTCA	289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCCGCC TTCATGGCCT AGTTGAAATC TTTAGGAATG AACTTCTGAG GGCCAAAAAA	60
TGTGACTGAC GGGAAACAATT CTTAAACTGA TTAACTAGCT GTAATATAGT TTTGTGAATT	120
TATTGCACTG ATGTTGTACC TTGTTGTTATA TCTGTCCTA TAAATAGT GTTGTGTTCT	180
CCTCTTAAAT ATTGCTGTGA ACAGTGGTGC CCATTGTAGC ATATGTTGA TTTTTTTTTA	240
TTATTTCTATA AGAAAACTAC GTTAATTTC CCTTACTTTC ATTGTAATA AGCTGTCTT	300
CCTATCTGGA TTTTTGTGT GCATACATAT TCTACTGATT AACTACTTTT GCAGTTTAA	360
TCCGTATTA TTCTTCTAC TTGTTTGT GTAAAAGGG AAAAATAAA AAAAGCTCGA	420
G	421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCCGCC TTCATGGCCT ACAGGTGTAT GTCACCATGC CTGGCTAATT TTGTTTTCT	60
TTTCTTTTTT TTTTTTCTC AGAGACAGGG TCTCACTATG TTGTCGTGTC TGCGTGGTCT	120
CAAACCTCTG GGCTCCATCT TCCCGCTTCG GCTTCTGAA GTGCTGGGAT TACAATAGGC	180
ATGAGCCACT ATGCCCATCC TAAAGTTTA CAGCCCAATA ATAGTAATAT TCCATCACTA	240
CAGCTTATCAT TGAGTTTCAG AAGTTAGACT GTTAAAGTT TCAGTAAAGA GCTTAAACCA	300
GTTTATTGTC GCAACTACTGT GTACACAATT ATTTTTGTA AAAGGAAGGA GATTCTGTC	360
TTAAATAGCT TTAATAAAAGT TTCAGTTCA TATACAGGAA ACCTCGAG	408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

GAATTCTGGCC	TTCATGGCCT	ACAGGCACTC	CAGTTATAAT	TATGTGCCCT	TCTTCCATT	60
CTACCACTTT	CTCTGATACT	TCTCACTTCT	TTCTCTGGTA	CTTCTCACTT	CTTCTCTGG	120
TATCATTTC	ATTCTTCATC	ATTGTTTAG	TGCCTTTACT	TCAATTCCCTT	CATTATTGAA	180
ATTTTCTTT	TTATCATCTT	GTGATTCACT	TTTTATTAT	TTTTGATAG	TATTCTCCTT	240
TTCTCCATT	CCACTCGAG					259

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

GAATTCTGGCC	TTCATGGCCT	AGTGGAGAGT	GCTATCATTA	ACACCTGAAC	TCTGGGCCAG	60
CTTAAGTGTA	TATTCTGTAA	AAAATTGAA	ATCCCCAAA	TGTCACATGC	TATGACAGTC	120
ACTTCTTTA	GTACTTGTAA	ATCATAACAAA	ATGGTGTATG	GGCTAAATAT	TGCAGCACCT	180
ATGTCGTCA	CCTCCATGTT	GCTTATTGAT	CATGGAATGT	TAATTTAGCA	ATAATTCT	240
CTGTGTGTC	GCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

GAATTCTGGCC	TTCATGCAAG	TAGGGTATGT	AGGCTTCAGT	TGGTTCTACT	TTCAGAGAGT	60
TAAGATGGAA	TGAGGCAGCT	CATGGCACTA	CAGGTCAGTT	GCCTTCTCTC	AAAAATGTT	120
ACTCATGCAT	GTGGGCACTC	ATTGTATTG	AATAACAGCA	ACAGTGCCTC	CCTCAGTTG	180
GAACCTCTAG	TCCACTTGTCT	CACTCATGGT	CCCTGCCCTTA	ACCCCAGTCA	AGTTCAAAGC	240
CATAGGCATC	ATTGTGCGA	CTGACATATT	AGGGCATCTA	CCAGTCAAAG	GGTGATTGTT	300
GTAGATGACC	TTTGGCCCGT	TCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

GAATTCCGCC TTCATGGCCT ACACCTCAT GTTTGTGCA GCATTATTCA CAATAGCAA	60
GGTATGGAGT CAAACCTGAAT GTCGAACACA TGAATGGATA AAGAAAATGT TCACACACAC	120
AATGAAATGT GATTTAGCCT TTAAAAAGAA GGAAATCCTG CCATTTGGAA CAACATGGAT	180
GAACCTGGAG GGCATTGTGC TAAGTGAAT AAACCAGACA CAGAAAGACA AACACTGCAT	240
GACCTCACTT ACTGTGGAAC CCCTCGAATT CTGGATCTCC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1299:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCCGCC TTCATGGCCT AATGAATTAA GTATTATTTC TATCATTTC ATTGCAAATT	60
GTCAGTATCC CCTGCTACGT TTCTACTAAT TTACCATCGC TTCTCAAA AATTGTGTT	120
AGAGTGCTAC AATTTCAGAC TTGAAATGA ATCACTATAA CTTTTAAAAA TTAGAGATT	180
TAAAAACCTGG AGATIGAATA TATATAAAAAA ATACAAAATT TGACATTAA AACCTCATTG	240
AACTTTAAA AAAGCCAGAC TCATATTAAG GCACACACCC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1300:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCCGCC TTCATGGCCT AGGGCCAATG GCCAGGATCT CTGGGGACTA GAAGGGTGG	60
TTCTGAAACC TGGGTAACAA CGAGACAAAC TCTAGCAATC TGAGCAAGGG AAGGGTCATC	120
AAAGTCCCAA AATCTAGCCC ACTAGCTGCC TAGCCAGGTA ACCAAGGCT TAGGGAGTT	180
AGACCCCTTC ACATAAGAA GTTAAATAAA AAGTGTGAGG TGAAAGAGATA AACACATGAA	240
GGGGTTGGCT AAAGTCAAAAA GAAGATCCGA GGCAGGTCTA GAATTCAATC GG	292

(2) INFORMATION FOR SEQ ID NO:1301:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 548 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

GAATTCCGCC TTCATGGCCT ACTCCTCAT TGCACCAACC AGGCCAGTT GTCCCTTTCC	60
AAACACAGCA ATCACGATCG CCTCTGCAA GGATAGAAAA TGAAGTGGAA CTCTTAGGAG	120
AAACATCTTCC AGTAGGGAGT TTAACTTACC CTCCATCAGC CCACCCCCCA ACATTAACCTC	180
CATCAGCTCC CTTGCAGTTC TTAACACATG ATCCCTTGCA TCAGGAGGTG TCCTTTGGAG	240
TACCTTATCC TCCATTATG CCTCGGAGGC TTACAGGATA GTAGATACCG ATCCCAGCAG	300

CCAATACCA	CTCCCCCTTA	TCATCCCAGC	TTACTGCCAT	ATGTGTTATC	AATGCTTCCA	360
GTGCCACCTG	CAGTGGGCC	AACTTCAGC	TTTGAATTAG	ATGTAGAAGA	TGGAGAAGTA	420
GAAAATTACG	AGGCCCTGTT	AAACCTGGCA	GAGCGACTGG	GAGAGGCAA	GCCTCGTGGA	480
CTGACTAAAG	CAGATATTGA	ACAACCTCC	TCTTATCGGT	TCAACTCTAA	CAACCACCAA	540
TCCTCGAG						548

(2) INFORMATION FOR SEQ ID NO:1302:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 384 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCTGGCC	TTCATGGCCT	AGTATCTATC	TAGTGCCTGT	TTGTGCGTTT	TTTTCTTTCT	60
TCCGCTGCTT	CCCCATTTC	CTTCTGCTC	TTTCTCTCG	CTCCCTGTTT	TCCCAGCAGC	120
ACATGGGGTT	CCTCGGAGGA	GCAGAGGTGG	CCGCCGTGGG	GGGGCGTTTG	GGCTGCGGTG	180
CTGGTCAATT	TTTCCCTTGC	TTTCTCTTTA	CTTTAGACAC	TGGCCCAACT	CCAGGGCTTT	240
CCTTCATTC	CCTCAGTGCT	TCTCTTCTGA	CCTGCATGTT	GAGTTCTGTA	TTGCTGGGGC	300
TTCCAACAAA	AACCAGAGTC	ACTGACAGAG	GGAACAGCAG	AGACCTTGTT	GGTATTCAAGC	360
TGTGATGGAT	ATAGCGATCT	CGAG				384

(2) INFORMATION FOR SEQ ID NO:1303:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 140 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCTGGCC	AAAGAGGCCT	AGGGTACGTG	AATCTATTT	TTCAGCTGGA	AATTCTATGA	60
AATCTGGTGT	GTATTTATA	CTTATAGCAT	ATCTCGAGGC	AGGTCTAAAT	TCAATTCTAG	120
ACCTGCCTCA	AGAGCTCGAG					140

(2) INFORMATION FOR SEQ ID NO:1304:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 620 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GAATTCTGGCC	AAAGAGGCCT	AAATAAGTTT	ACTTTTATTT	TTGGTAACAC	TTTACTGCAT	60
TGTCGAATA	TTGACAATCA	GTATGCATTA	TGAAGCTACC	TGGCTAACAT	TGTGTAATCTA	120
CTGTGTGTGC	CAGGCCCTGG	GTTCATGCT	CTACATGCAC	TTATATTCA	TTTAATTCTC	180
TCTGCAACCT	GAGATGGTAT	AGCCACCTCA	TTTTACAGAG	TTGAAACTGA	GGCTCAGAGA	240
CTGAAAGTTA	AGCCTGAGGT	TGCACTCAAT	AAGAGGCAGA	GCTGGAACGT	AAACCTACCT	300

GTGTCTGACC ACCAGTTCGT GTTCTGACGG CAGGCTAGTC TGCATCACAG AGTGTGGAGT	360
AGATGGTCA TGCGCTAG GATGGGCTAG GTATCACTGT AGGTAAGAAA CAGCCCCAAA	420
CTATGGAAAT GTACACCACC GAAGGCTCTT TTCCCTGCCA TGCTGCACAT CCTCCATGGC	480
TCTCCTGTGC CCTGTGCCCC ACATGCCCTC ATCCTGCCAC GAGAATAAAG GAGCAGCCTC	540
CATATGGGAG CTGTCAGCTG CTCTAAGAGA TGAAGGAGAG AGTGGCCGT CTCATGGCT	600
CCCAACTCTT CTGCGTCAG	620

(2) INFORMATION FOR SEQ ID NO:1305:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 736 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCCGCC AAAGAGGCCT ACTTTGGCT CAATGTTTC CAAACTTATT TGACCCCCAA	60
ACCTTTTCA TATAACCAAT AATAAGCTAC AGAACTAATA TTCTGCAAAT GTCTCTTGG	120
ACACACTGCC TAAACAGAT ATTTCTATAG CTGTCAGTAT AGTTATGTT CTCCCAAGCC	180
TAGTTATCTC CAGTTGTTT AAGGGTGTAA TGAAAATTC TTAAAATATA TATGAATTG	240
TGTAACACAC ACAGAGACAC ACACACATCA TACTTTAAGG GGGTGAGGAT CATTAACTCA	300
GATAATTTT AGATTTCTCA GTGATTCTCA ATCTCTTGA ATTTTACTTA CATTTACACA	360
CACACGCACA CACATATGTA TATACACATA TCATTTAAGG AAGCTGAGGA TCACAAATTC	420
AGATAATGTA TAAGTTCCC AGTGATTCTC AACCTCTTG AATTTTACTT ATAATTACAT	480
ACACACACAC ACTGCTACTT ATATAATGTT TCTCATGTA TCATGGTAAC AGCTCAAATT	540
CCCAAAGCAA GGGAAAGACTT CTCATTGTCG GTTAAACCTG TTAAAACATG AAAATATTCA	600
TTGAGCTAG TTCTTGTTA TAAAATACAA GAAATAAGAC ATTCAAGGCAT TTTCCCTTTA	660
TGAAGATGTT CAGTCATCCT TTCTTGAAAC TACATTAGG AAAAGTATAT GTCTTTATTC	720
CATTGAAGTT CTCGAG	736

(2) INFORMATION FOR SEQ ID NO:1306:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 511 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCCGCC AAAGAGGCCT ACAGCAATAT GCATCTGCA CGTCTGGTCG GCTCCTGCTC	60
CCTCCTTCTG CTACTGGGG CCCTGTCTGG ATGGGGCCG AGCGATGACC CCATTGAGAA	120
GGTCATTGAA GGGTCAACC GAGGGCTGAG CAATGCAGAG AGAGAGGTGG GCAAGGCCCT	180
GGATGGCATC AACAGTGGAA TCACGCATGC CGGAAGGGAA GTGGAGAAGG TTTCAACGG	240
ACTTAGCAAC ATGGGGAGCC ACACCGGAA GGAGTTGAC AAAGCGTCC AGGGGCTCAA	300
CCACGGCATG GACAAGGTTG CCCATGAGAT CAACCATGGT ATTGGACAAG CAGGAAAGGA	360
AGCAGAGAAC CTTGGCCATG GGGTCAACAA CGCTGCTGGA CAGGTTGGGA AGGAGGCAGA	420
CAAACGTATC CATCATGGGG TCCATCACGG GGCAACCCAG GCGGAAAGTG AGGCAGGGAA	480
GTTTGGCCAG GGAGTCGACA ATGCACTCGA G	511

(2) INFORMATION FOR SEQ ID NO:1307:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 219 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTGGCC AAAGAGGCCT AATTTTCCC CACACCACAC CACTGTCCTC TGTGCCCTGTG	60
GAAACCACTC AAATGCCTCT CCCAAGCCT TCTTTCAGTA ACAACCATCT CATCCGGTTG	120
ATTACTGTAG CTTCGGCCT GTATAACCC TCCTTATGTC ATGCCCTGTAC CAGATGTTCC	180
ACTGCATCTG TATCCCACCA GATTGCACAT ACTCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGGGCC TGGCCCTTGT GGATACTTTC TAGGTGATTG GAGGAGGAAA GGCACAGCCA	60
TGTCTCTAA AGTTAACAAAG CACTAAGCTT TCCCAGTAG TGAAATGTC AGCCTCTGCT	120
TCTGCACTT ATTGTTTCAT TCAGCAGAAA GTCACTGAGA GCCTTCTGTA CACCAGGCAC	180
AGTGCTGGGC AGTGAAAGAG ACAGACATGT CCCTGGATCC AGGGAGGAGA TGACCAAGTG	240
ATGGCTGTCA GGCCCAGACC TTGCTGTTTG TCTGCAGCCT CTTCCCTCAG GCAACTTGTG	300
CTCTATCAGG AGAAATGAAA TAATTATTAT CTGGAGCTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTGGCC TTCATGCCTA AAAAGGGTCA GAGGAAGGCA GTATCCTTG GGTGTTGCTG	60
AAGTGAAAA TGGTGAACAT TGTGATTTTA CAATCCTAAG AAATATGTTG ATAAGAACAC	120
ACATGCAGGA CTTGAAAGAT GTTACTAATA ATGTCCTACTA TGAGAACTAC AGAAGCAGAA	180
AACTTGCGAGC TTGACTTTA ATGGAGTTG ATAACACAA GAATAAGGG CAGCTGACTA	240
AGAGCCCTCG AGTTGCAGGG AGCCAGATC ATGCCACTGC TCTCCAGCCT GGGTGACAGA	300
GCAAGACTCT GTGCCCCCCC CCCACCCCAA AAAAAAGAA AACAAAAATT AAAATCTTTA	360
GTTACTGTAT TATTCAAAAA TGTCTACTTT CAAGAAAAAC TACAGCCATG CAAAGAAACA	420
GTAAAATGTG ACCATACTCA GGAAAAAAAG CAGACAATAG AAATGGCTTC TCACTAGGGC	480
TATATGTTGG ATTTAGCAGG CAAAGACTTC AGAGGCCTTT TAATAAGTAT ATTCAAAGAA	540
TTACAGGAAA ATATGAAAAC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGC AAAACCCACA 60
 GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 105 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTGCG TTCTGTTAG CATGCTATCC TGTGTGAAAG AACTGAAAT CCAATATTAT 60
 GGAGAGTATG TAAAGGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 407 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60
 AGGTCTTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCTGAGAG 120
 ATTTCTTGTA GTCAAGAAATG GCCAACATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180
 AGTTTCTTGC TCTGTGCTCT AAATACTCTC TATTACCTTC AAGATGTCAG CAAAATGTGA 240
 TACATAGCAA TCTTGTGTTA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300
 GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCAAGAAA CTAGGGATAG AGGGGCTGGC 360
 AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

GTTCAAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC	120
CTCCCAGCCT TTGCCTTTT TTTTTTTTTA GGAGGAGAAAT TAATTGATAC	180
ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG	240
GATTCAAGCAC CCAAGCAAAA CAATTGCCCT GTGATAGAAG CGCGATCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1314:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTAACAG ACCTCAAGTA GGATAAACAC	60
AAACAGATCT TCACTAAGTC CTACTGCTGA AAGACAAAGA CGAGGAGAAC ATCTTGAAAG	120
CAGTGAGAGA AAAACAACTC ATTATGGAGA GAGCAATGAT AAAATCTTA TCAGAACAGT	180
GGAGGCCAGA AGGAAATAGA GTGACATATT CAAAATGCTG AAGGAAAAAT TTGCAACTAC	240
AAGTTCTAGA TCCAGCAAAA TTATCCTTC AGAATGAAGG TTAGTAAAG ACATTCCAG	300
ACCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1315:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTG	60
TATTTTGT AGAGACAGGG TTTCACCATG TTGGTCGGGC TGGTCTCAAA CTCCTGACCT	120
CAGTGATCCA CCCGCCTTAG CCTCCCAGAG TGTTAGAATT ACAGGGTGA GCCACTGCAC	180
CCGGCTCGGA AACATTTTA AAACGGGCCA GGGTTGTCCT TGAAAGTCCC AGGTTTCCTC	240
ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCACTGT CTGGGGACCC	300
TGGCTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGGG TGGTAATCA GGTGTTCATG	360
TCTGATTCTG GATGTTCTCT GCAGCTCTG GAGTCTCCTG ATTGGAGAGC AGCAAATGAC	420
TGTCAATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG	469

(2) INFORMATION FOR SEQ ID NO:1316:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA	60
AAGGTGAATT TTATTCGTG ATAAATTAAA AAGTAAAACA AAAGAGACAA AAATAGTAAC	120

CAGGGAAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA	180
ATCCCATCTC TAATAAAAAT AGAAAAATT A GCCAGGGGTG GTGGTGGCG CATGTAGTCC	240
CAGCTATCCA GCACCGCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTGGCA ACGCAGACAA AGAAAGGAGT	60
GGCCCGTATG GATTCACTGA GATGCAAGAA TTGTCGACCA AAGGAATGTT AAATGAAAAA	120
ACCAAGATGCT GGGCTCAAGG CATGGATGGA TGGCGACAC TTCAGTCCAT ACCCCAGCTC	180
CGAGTCATAT AAGGTAACCC AGACAACAC CTACGAATT AAAGCTCCTA TAAGTTGCC	240
TTTCTGCATC CGAACGTGTGA TATTTGAAAG TTAAAAACGT TATCTTACAT ACATAGATCT	300
TAAAACGTAT CTTACACCC AACCTACTCA CAGATGCAA GGCAGTGGTC GTGGTCTTCC	360
ATTGCTTGGG GTCCCTGGGC CGGGTTTGAG GCTGAATGTC AGGGTTTCCCT TTGCCATAAC	420
CTCATCTGC ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGACTTGGAG GCTGGCATCT	480
GCTGGGCACT GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGAACCTCTA	60
CTTTCTTAC AAAACCTAC CCACATGGCC CTTCTCGCG GAAGAGATCT TGAGCCTCCC	120
TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGCTA TCTTCCCCAG	180
ACTAGGGCTT TCTTGAGGAC AATCGTGGTG GCCCAGTGT TGACGCTGTC TCCCCTGCAT	240
GTAGTTGGTC TTCCCTGGTTG CTTCTGGCCCT CTGGCTGCC CTTGGGAGAC TGAAACTCAG	300
AGGACAGCTT CTGGCTTGCT GTTACATGGC TCCCACAGGG AGACTGGCCC CACCTGTGCC	360
CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC	420
ATGCATATGG ATCGTGGCCA CACGCCTCGA G	451

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

GAATTCCGGCC	TTCATGGCCT	ACACTACGGT	ACTCCCGAC	TATCACCCCTT	AATGTAACCTT	60
TAATAAACAT	GGCCATT	TTT	AAAAAGGAC	ACAGGA	ACTA	120
TTTGAAAAT	TCTAAATATG	TCTAGAAAAA	CTTTCTTTC	TGTTCCATT	TCCTCCTAT	180
TCTCCATGAC	CCCCTCCCCG	CGGACTGTAT	CAGGTACAGC	CTGTTGGAAA	TCCAGCACCG	240
CACATTAGGC	ACACCAGTGG	TAAGTTACT	TGTTGAGTTA	TCACCTTTT	TTTCCTTTA	300
ATCAGAGAGG	CAGCTCTGTG	TTGAAGATGC	TAGGTAGTGA	TGGAAAAGAC	ATTAGGAAAAA	360
TTTGTACCG	TGGTAACCGG	GGATGGACAT	CATGACCTT	TGTGATATGC	ATGCTGTGGC	420
CTTGGTAGTC	TCTTCCCTA	ATTAACATCC	TGTGAGAAC	GTGAGAGATG	ACTCGAG	477

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

GAATTCCGGCC	TTCATGGCCT	AGACGGAGGC	TGGAGATTCA	CATGGGGCGA	GGAGTTGCAG	60
ACCAGCCTGG	GCAAAGCATG	TGAGGCCCC	GTCTCTGCAG	AAATGAGAAA	ATGAGCTGGA	120
TGTAGTGGCA	CCGACATGTG	GTCCCAGCTG	CTGGGAGGGC	TGAGGTGGGA	GGATTGCTTG	180
AGCCTAGGAG	TICAAGGCTG	CGGTGAGTAG	ATCGTGCAC	TGCGCTCCAT	CCCTGGCAAC	240
AGAGCAAGAT	CATTCTCAA	AAAGAAAAAA	AAAGCCATCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

GAATTCCGGCC	TTCATGGCCT	AGGGAAATGT	GTGATTGGGA	AAGAGGCAGC	TTTTAAAAAT	60
GTGCTGGCC	TTTGACCACG	CAATTCACT	TTCCAGTATT	TATTCTAGGA	AAATACTCAT	120
ACTATTGCAA	AGTTTATATA	TAAAGATAGT	TATAACTGCA	TTGTTTATCA	TTTACAAAAAA	180
GAAAACATCT	GAAGGCCAA	CAAGACGGAA	CTGGTTATTC	CACATTGCA	CATTGATACA	240
AGGCATGCT	CGAG					254

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

GAATTCCGGCC	TTCATGGCCT	AGGCACAGAA	AAATTGGAAA	GGATTGGTGG	TCGTACATCT	60
TGCAGCTCAC	TTAGTAGCTG	CATGCATGTA	GACCGGGTGG	TGTTGATGCA	GTGTTGACTT	120

GCTGGCATTG GGGTGGGTGG TAGCATGGTC AAGCTGGCTG AGTGATGGGA TATTGTCTCA	180
GAGGTTGGTG CAGGGAAACT CTGTTGGGTGT GTCTAATGCA AGGATAATGA CAATGTCCTG	240
TCTGCCTGGT CTTGGGGGG TCAGGTGGAG ATGTCCTTT GGAAAGGCAG CCATTCCTTT	300
TGAGTGTCCA GAGGGCATGG TGCAAGGCACA TGGATTGAGT GGAGGACTCG AG	352

(2) INFORMATION FOR SEQ ID NO:1323:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 440 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

GAATTCGGCC TTCANGGCCT ACTGTGTGTA GAATTCTGTT TTCTCATGAT ATTGAAGACA	60
TTATTCAGT ACCTTGACTG CTACTATTGC TGTTGAAAAG TCTTAATTGC CCTTCCTTTG	120
TAAGTAATAA CCCCCTTATT TGGCTGTGTT AACGCCTTTT TTTCCCTTCC CATTAGTGT	180
TTTGAGCTTT TGTTAAATGT ATTGAGGGCG TTATTTTTT CATTCCATCA TTTTATTTTT	240
TGTAATCCA CTGGGATTC TTGGGCTTC CTGGATCTGA GGATAATAAT AATGCTTTG	300
AATAATTGTG GAAAATTCTT AACCAATTATC TCTTGAATA ATGCCTCTTA TTTCTCCTT	360
CTATAACTCT AATTAGACAT ATAGTCTATT TTTCATGTTA CTTATGCCCTT TTCATCCTT	420
TTCGTCTCCA CATACTCGAG	440

(2) INFORMATION FOR SEQ ID NO:1324:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

GAATTCGGCC TTCATGGCCT AATTGAATTTC TAGACCTGCC TAAAATGCC AGTTACCTGA	60
AATTGTATAA ATCTTGCCA AAAGTGTGTT AACCTAACAC AAACCTCCCA TCTCTTACCT	120
CTTAGCACTG TGCTCATCTT GAGGGACAT AGTCCCAATT TTGTATTTA TATAAACTG	180
TTAATGAATA TGTTGAGACT TCATATGGTT GTGGGTAAGA GAATACTGCA TTCAGATAGA	240
AAAGATGCTA TATAGCTAAG TTGATCCGCG GATCCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1325:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

GTTCCTTTT CTACTTACAA AGAAAATAAA TAGAAATAGA TTTTACATGC TTTTATTTCTT	60
TGAGACAAGC CATTGTAAT TGTTACTAGA CTAAGTAGTA GTATACCAGT CATTGACTGG	120
TCTTTCAAC TCCACTCAA TTTGTAAAAA GCAATTCTC TTATACTATC ATCTTTTTG	180

TTTTTAAGG TTTTGGTT TGTTGGTTT TTTGGAAAA CATGATACAT TTCTCATGCT 240
 TGATCTAAAG AGGCTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTGGCC TTCATGGCCT ACTATCTTGA ATGTCCAAT CCAACTCCTA ATTATTTAA 60
 AAATCTATGC ACTTCTTCA CTTGAATTTC TATGCCCTCA TAGACTTAC AGGCACATGT 120
 TCTATCACCA ATTAAGAGAA ATTTAACCTTA CACATTTAC AACTTATACA TGCAATTGG 180
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTAA CTGCCATGTT AAAAAAAA 240
 TCAGTGAACA TTGTTGGCT GACCTAATTG TTTGAAATAA GTTGGCCATC AGTGTAATTG 300
 ATTGAGCTAT CTGTACAACC CCCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60
 TCAAACTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCAGGACT TCAAACCTCA 120
 CTCCCACTAA TAGCTTTTG ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTTACCCCCC 180
 ACTTAAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCTG ATCAAGTATC 240
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300
 ACCACTAACC CTCGAGACCA CTTCATATAA ATACTTATTT ATTTCTTATT TCCCCTGACT 360
 AGAAATATAA GCTCCATGTT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCCAGCTCC 420
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTCTAT GGAAAAAAAT ACATAAATGT 480
 ATAACAATCT TCATTGTA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540
 ATCCTAACCTT CATCACTTAC TAGTCATGGG ATATTTTAC TCAGTTTCAC TTTTGAAA 600
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGAGTA AGTGAATTAA TGCACACAAA 660
 ATTAGGCCAT GAAGGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

GAATTTCGCGG CCGCGTCGAC TGTCACTGAG CTTCTTGGCT CTCTTATATA TATTCTTAT	60
TGTCATTTAC TTGGTGGAC GAAGAGAAGG AGAGAGTTGG AATTGGCCT GGGCCTCAG	120
CACTAGATTG GCAAGACATA TTGGATATTG GAAACTCCTC CTTAAATTGA TGTTTGAA	180
TCCACCTGAG TTGCCAGAGC AGACTACTAA ACCTTTACCT GTGAGGTTTG TGTTTACAGA	240
TTACAATAGA CTGTCCAGTG TAGGTGGAGA AACTTCTCTG GCTGAAATGA TTGCAACCCCT	300
CTCGGATGCT TGTAAGAGAG AGTTGGCTT TTGGCAACC AGGTTTTTC GACTATTCAA	360
GACTGAAGAT ACTCAGGGTA AAAAGAAATG GAAAAAAACA TGTTGTCTCC CATCTTTGT	420
CATCTTCCTT TTATCATTG GCTGCATTAT ATCTGGAATT ACTCTTCTGG CTATATTTAG	480
AGTTGACCCA AAGCTCGAG	499

(2) INFORMATION FOR SEQ ID NO:1329:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 200 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

GAATTTCGCGG CCGCGTCGAC CGCTGCCAAA TGCTTCACTC CTATCTACTC TCCCATTCC	60
TTATCTCTC GAACTCCCTC AACAGAAATC TTGCTCTCTC CCTAAATCCT CAGTGCAACA	120
TACGTCCGCA AAAACTAAAT GATCCCTCTC CAGCCAGACA GAAAATCTC AACATATCAA	180
CACTCCCAAG GCGTGGACAG	200

(2) INFORMATION FOR SEQ ID NO:1330:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

GAATTGGGCC AAAGAGGGCT ACAGTCTTT TAGGCATGTT TTTTTTTTTT TTGGTGTGTG	60
TGATGACAGG AATATGCATT TTATCTGTAG TGGTTTAAAC CCCTGTATTA AGCGTTGTTT	120
TCTTTCAAGA CTGCAAAATT CAAAATGGGG CTCTCGAG	158

(2) INFORMATION FOR SEQ ID NO:1331:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 552 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

GAATTTCGCGG CCGCGTCGAC GATCATGAAG CGCTCGGTAG CCGCTGGCT CTTGGTCGGG	60
CTCAGCCTCG GTGTCCCCCA GTTCGGAAA GGTGATATTG GTGATCCAA TCCATGTGAA	120
AATGGAGGTA TCTGTTTGCC AGGATTGGCT GATGGTTCTT TTTCCTGTGA GTGTCCAGAT	180
GGCTTCACAG ACCCCAACTG TTCTAGTGTG GTGGAGGTTG CATCAGATGA AGAAGAACCA	240

ACTTCAGCAG	GTCCCTGCAC	TCCTAATCCA	TGCCATAATG	GAGGAACCTG	TGAAATAAGT	300
GAAGCATACC	GAGGGGATAC	ATTCATAGGC	TATGTTGTA	AATGCCCCG	AGGATTAAAT	360
GGGATTCACT	GTCAGCACAA	CATAAATGAA	TGCGAAGTTG	AGCCTGCAA	AAATGGTGG	420
ATATGTACAG	ATCTTGTGC	TAACTATTCC	TGTGAGTGCC	CAGGCGAATT	TATGGGAAGA	480
AATGTCAAT	ACAAATGCTC	AGGCCCACTG	GGAATTGAAG	GTGGAATTAT	ATCAAACCAG	540
CAAATCCTCG	AG					552

(2) INFORMATION FOR SEQ ID NO:1332:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 760 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTTCGCGG	CCGCGTCGAC	CTCAGAACTA	TTTAAATTAA	GTAAATTAC	TATTATATTT	60
TATAGTAAT	ATTGGTCCAC	TTTATAGCTC	AGAACCTAAA	AAAGAAATAT	GTACCCAAAC	120
TTCTCTATGT	TTACAACCA	CCCAGAGTTT	AAGATTCTGA	ATTGTCCTTT	GTTTGTTAA	180
AAATTAAACC	AAGGGTCAGG	CACAGAGGT	CATGCCATA	ATCCCAGCG	TTTGGGAGGC	240
CGAGGCGGGT	GGATCACTTG	AGTTCAAGGAG	TTCGGGACCA	GCCTGGCCGG	CATGGTGAAA	300
CCCCGTCTCT	ACTAAAAATA	CAAAAGTTAG	CCGGGTGTTG	TGGCATGTGC	CTGTGGTCCC	360
AGCTGCTTGG	GAGGCTGAGG	CAGGATAATC	NCTTGAAACC	AGGAGGCAGA	GGTTGCANTT	420
GCAGTGAGCC	GGGATTGTGC	CATTGACTC	CAGCCTAGGC	AACAAGAGCG	AAACTCTGTC	480
TTAAAAAAAAAA	AAAATTAACC	AAGGTTCTCC	TTTCTCTAAA	TCTAGCAATT		540
TGTTCTATT	TTCAGAAATA	AACTTAATAA	TTTTAATACA	GATTTAGCT	TTGGCTTTTT	600
TCTTACTTTT	TAGTTGCAA	ATTATTTTAT	GGTATTCTCA	CAAAGTAGAT	ACAAATTTGC	660
ATTCAAGAATG	CACCTTTGT	TTTCTGGGT	TTTTTGT	TTTTGTTGT	TTTTTCAGAA	720
AACTCATGGA	AAAGTACACT	GTTCACCTCA	GCATCTCGAG			760

(2) INFORMATION FOR SEQ ID NO:1333:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 579 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCCGCC	AAAGAGGCCT	ANAACTGGGT	AAGGAGCAA	AAAAGTGACA	GAGGCCAGGC	60
GCGGTGGCTC	ATGCCTACAA	TCCCAGCACT	CTGGCCAAAT	ATTTGATT	AAATTCCCAT	120
TGTTACTGAT	AAAAAAAAAA	AAAATCTGG	ACAGCTAAC	CTGGAGATT	AGAGGCTATA	180
GACACAAATT	ACACATCCATA	CAGGCTGTG	AACTTCATGC	AGAGAACAAA	CAACAAACAA	240
AAAACTCTAA	TTCAGACTCT	CTCATTTCA	CTTAGCCAAC	ACATTGGAG	ACTTAGGGGC	300
CAGTTCTAGA	AGCTGCTTT	ACCTCTAGAC	TCGGAGGGC	AGGCCCTGTC	ACCGAAGGG	360
GGAAAAACTCT	TCTTGGCTGT	CAGGCCGAT	TGAAGCCT	TCGCTCCCC	TGGCCCCAGC	420
TTTCCTGAC	TCTTTTCA	GTGTCTGACA	CAGGGCAAAC	CACCAACCAC	TCAAATGAGC	480
AAACAATTCC	AGAAAAAAGA	ATCCGAGATA	AAGAATAC	AACTAGGAGT	CTTCCATTG	540
TAGCCTAAAC	CGTCGATTGA	ATTCTAGACC	TGCCTCGAG			579

(2) INFORMATION FOR SEQ ID NO:1334:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 521 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GAATTTCGCGG	CCCGCGTCGAC	CAACAAGGGC	AAAGGCCCTG	AGACACAAAC	CAAATGTGTG	60
GGTGTAAAGG	TAAGAAAGGC	CAGTGAGGCC	AGCATGATGA	ACTGGGGAG	CATGGTGGCT	120
GATTTGGTCA	GGAAAGGGAAC	AGAAACCAAGA	CCACTTGGGA	TCTTCTAGCC	AGAGTAAAGA	180
GACTGAGTTT	ATTCTCTATTG	TAATGGGGAG	CTATTCAAGAG	AGGTTAATCA	TGAAACTGAT	240
GTGACCTGAG	CTACACTCTT	AAAAGATGCC	TCTGGCTGCT	GTGTGGAGAA	TGAACCATGG	300
GGGCAAAAGC	AGAAACAAGA	AGACCACCTTA	AGAGGCTCTT	GCAATAATTT	ATGTGAGAAG	360
AGTGATCATC	TTGACTAGGG	TGGTGGTGGT	AGAGGAGGTG	AGTGGTGGTC	AGGACTGAGA	420
GGAGCCAACA	GAATTTCGCTG	GCTGCTTGG	ATGTGGTGTG	TGAGGCAAAC	TGAGAATCCA	480
AGATGGCACC	AAGGCTTATA	CCCTGAGCAA	CTGAACTCGA	G		521

(2) INFORMATION FOR SEQ ID NO:1335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 775 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAAATTTCGCG	GCCGCGTCGA	CGCTCTTGAG	TGAGACCCAA	CAAGCTGCTT	TTCACCAAAT	60
TGCAATGGAG	CCTTTCGAAA	TCAATGTTCC	AAAGCCCAG	AGGAGAAATG	GGGTGAACATT	120
CTCCCTAGCT	GTGGTGGTCA	TCTACCTGAT	CTTGCTCAC	GCTGGCGCTG	GGCTGCTGGT	180
GGTCCAAGTT	CTGAATCTGC	AGGCGCGGCT	CCGGGTCTG	GAGATGTATT	TCCTCAATGA	240
CACTCTGGCG	GCTGAGGACA	GCCCGTCCTT	CTCCTTGCTG	CAGTCAGCAC	ACCCCTGGAGA	300
ACACCTGGCT	CAGGGTGCT	CGAGGCTGCA	AGTCCTGAG	GCCCAACTCA	CCTGGGTCCG	360
CGTCAGCCAT	GAGCACTTGC	TGCAGCGGGT	AGACAACCTTC	ACTCAGAAC	CAGGGATGTT	420
CAGAATCAA	GTTGAACAAAG	GCGCCCCAGG	TCTTCAAGGT	CACAAGGGGG	CCATGGGCAT	480
GCCTGGTGCC	CCTGGCCCGC	CGGGACCAC	TGCTGAGAAG	GGAGCCAAGG	GGGCTATGGG	540
ACGAGATGGA	GCAACAGGCC	CCTCGGGACC	CCAAGGCCA	CCGGGAGTCA	AGGGAGAGGC	600
GGGCCCTCAA	GGACCCCCAGG	GTGCTCCAGG	GAAGCAAGGA	GCCACTGGCA	CCCCAGGACC	660
CCAAGGAGAG	AAGGGCAGCA	AAGGGCAGTGG	GGGTCTCATT	GGCCCAAAAG	GGGAAACTGG	720
AACTAAGGGA	GAGAAAGGAG	ACCTGGGTCT	CCCAGGAAGC	AAACAGAGAC	TCGAG	775

(2) INFORMATION FOR SEQ ID NO:1336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GTAGATTTAG	ATGTACAGAT	AGAGGGTATGA	TTTTTTTAAA	AGGCACCTCA	GTATGGTAA	60
TGTTATCTT	CTTGTGTTTC	AGTGCACACA	CATACACACA	CACCATAGAT	GCAAAGTGTG	120
TAGAAAATGT	ATTGAAGGAT	ACCCAGGTAC	TCGAG			155

(2) INFORMATION FOR SEQ ID NO:1337:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

GAATTCTCGGG CCGCGTCGAC ATTCAATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT	60
CTTTTCCCTC TTTTCTTC AGTTTAGTT TATGAGATTG GGTCTTGCTA TGCTGCCAT	120
GCTAGGCATG AACTCGAG	138

(2) INFORMATION FOR SEQ ID NO:1338:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 249 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

GAATTCTCGGG CCGCGTCGAC CTAAACCGTC AATTCTCCC ATCTTAGGTT TCTCTCCTCG	60
GAAGCCCTCT CTTTAGAACATC GAACATTTTC TCTTCTGGCT TTGTTCCGAT GGTTTCTGGT	120
CTGTTCTTT CTGCTCCCT CGTGGCTTTC ACTTCTGTTT TCTTTCCAG AATGACGGTC	180
CTCTCATTTG ACCGTGTGCT TTCCGAAGCA CCTGCTCCA CCTTGTCTCG GCGATCCGG	240
TTACTCGAG	249

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

GAATTCTCGGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTTGGTACAG	60
GTTTGTGAAT GACAGTTAT CGTCATGCTG TTAGTGTGCA TCCCTCGAG	108

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 652 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTGGGCC	AAAGAGGCCT	AATAGAAGGC	ATTCCATATT	TGTTCAATGA	ATTAACAAAT	60
GTTTTTCATA	TTAATTGTTC	TGATTTTAC	CTCCTTAGGC	CAGCCTTAT	TATTGCCATA	120
TAAGCCTCT	GGTAGTACCA	AGATGTATTA	TGTTCCACAA	TTAAGACAAA	TTCCTCCATC	180
TCCGGATTCT	AAATCAGATA	CCACCGTTGA	AAGCTCCCAT	TCAGGATCCA	ATGATGCCAT	240
TGCTCCAGAC	TTCCCAGCTC	AGGTGCTAGG	CACAAGAGAT	GATGACCTCT	CAGCCACTGT	300
TAACATTAAA	CATAAAAAG	GAATCTACAG	TAAGAGGGTA	GTGACTAAGG	CATCCTTGCC	360
AGTGGGAGAA	AAACCCCTGC	AGAATGAAAA	TGCAGATGCC	TCAGTTCAAG	TGCTAATCAC	420
TGGGGATGAG	ACCTCTCG	ACAAAAAACCA	GCAAGAGATT	CACAGTACAA	GGGCAGTGAC	480
TGAGGCTGAG	CAGGCTAAAG	AAAAAGAATC	TTTGAGAAA	GATACTGCAG	ATTCCAGTGCG	540
TGCTGCTGCT	GCAGAGCACT	CAGCTCAAGT	AGGAGACCA	GAAATGAAGA	ACTTGCCAGA	600
CACTAAAGCC	ATTACACAGA	AAGAGGAGAT	CCATAGGAAG	AACGACCTCG	AG	652

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

GAATTGGGCC	AAAGAGGCCT	ACGTGCCATT	TCTCTTCCAC	TATGAGAGGA	CCGATTGTAT	60
TGCACTTTG	TCTGGCTTTC	TGTAGGCCCT	TGCTTTTCAG	CGTTGCCACA	CAAATGCTGG	120
CCTTCCCCAA	ATAGAAAAGG	AGGAGGGAGA	TAGCACATGT	TCATGCGGAA	AAAGGGCAGT	180
CCGATAAGAT	GAACACCGAT	GACCTAGAAA	ATAGCTCTGT	TACCTCAAAG	CAGACTCCCC	240
AACTGGTGGT	CTCTGAAGAT	CCAATGATGA	TGTCAGCAGT	ACCATCGGCC	ACATCATTAA	300
ATAAACGATT	CTCGATTAAC	AAAGAAACCC	AGCCTGGACA	AGCTGGCTC	ATGCAAACAG	360
AACGCCCTGG	TGTTTCCACA	CCTACTGAGT	CAGGTGTNCC	TCAGCTGAAG	AAGTATTG	420
TTCCAGCCAG	CCAGAGAGAA	TATCTCNTGA	AAGTGGANIT	GCCAAGGCCA	TGTTAACCAT	480
TGCTATCACT	GGCAGTCCCT	CTCTGACTGT	TGATGAAAAG	GAGGAACTCC	TTACAAGCAC	540
TAACATTTCAG	CCCATTTGAG	AAGAGATCAC	AGAAACACAA	AAAGGTTTTC	TGAAGTATAT	600
GGATAATCAA	TCATTTGCAA	CTGAAAGTCA	GGAGGGAGTT	GGTTGGGAC	ATTCACCTTC	660
ATCCTATGTG	AATACTAAGG	AAATGCTAAC	CACCAATCCA	AAGACTGAGA	AATTGAAAGC	720
AGACACAGAC	CACAGGACAA	CTTCTTTTC	TGGTGTGAG	TCCACAGCAG	GCAGTGAGCC	780
TGGAAGCCTC	ACCCCTGATA	AGGAGAAAGCA	CCTCGAG			817

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTGGGCC	AAAGAGGCCT	AGCACCATGG	ACAACCCACA	GGCTCTGCCA	CTCTTCTTAC	60
TCCTGGGGAT	CCTCACCCCTC	AGAGCCTCTT	CTGGACTTCA	GCAAAACCAAC	TTCTCTCTG	120
CCTTCTCTTC	AGACTCAAAG	AGCTCTTCCC	AGGGGCTGGG	TGTGGAAGTT	CCCTCCATCA	180
AACCTCCAG	CTGAAAGTT	CCAGATCACT	TCCTGGATTC	AAAAGCCTCT	GCTGGAATCT	240
CTGATTCCAG	CTGGTTTCTC	GAGGCCCTGA	GTTCCAACAT	GTCTGGGTCC	TTCTGGTCAA	300
ATGTTTCTGC	TGAGGGCCAA	GATTGAGCC	CGGTTTCCCC	CTTCTCTGAA	ACCCCTGGTT	360

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCTGC CAAAGACCCC AAGCCTTCCT	420
TCACTGTTAA GACCCAGCT TCAAACATTT CTACTCAAGT CTCCCATCTC CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG CGCGTCGAC CAGGAAATGA AGACATTGCC TGCCATGCTT GGAACGGGA	60
AATTATTTG GGCTTCTTC TTAATCCAT ATCTGGACAT CTGGAACATC CATGGAAAG	120
AATCATGTGA TGTACAGCTT TATATAAAGA GACAATCTGA ACACCTCCATC TTAGCAGGAG	180
ATCCCTTGA ACTAGAATGC CCTGTGAAAT ACTGTGCTAA CAGGCCTCAT GTGACTTGGT	240
GCAAGCTCAA TGGAACAAACA TGTGTAAAAC TTGAAGATAG ACAAAACAAGT TGGAAAGGAAG	300
AGAAGAACAT TTCACTTTTC ATTCTACATT TTGAACCGAT GCTTCCTAT GACATGGGN	360
TCATACCGCT GTTCTGCAA TTTTCAGTCT AATCTCATG AAAGCCACTC AACAACTCTT	420
TATGTGACAG GAAAGCAAAA TGAACCTCT GACACAGCAG GAAGGGAAAT TAACCTGGTT	480
GATGCTCACCC TAAAGAGTGA GAAACAGAA GCAAGCACCA GGCAAATTG CCAAGTACTG	540
CTATCAGAAA CTGGAATTAA TGATAATGAC CCTGACCTTT GTTTCAGGAT GCAGGAAGGG	600
TCTGAAGTTT ATTCTAATCC ATGCCCTGAA GAAAACAAC CAGGCATTGT TTATGCTTCC	660
CTGAACCATT CTGTCATTGG ACTGAACTCA AGACTGGCAA GAAATGTAAA AGAACACCCA	720
CTCGAG	726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTGGCC AAAGAGGCCT AGGGACAGCA ATCAAGTTCT AATGGTGCTC ACTTTTTAGG	60
TCACCTTCAT CACAGACTGC TCCAAAGGCAG GAGCAATGTG GAACGAACCA GCACATTAC	120
TTAAAGATCAA AGTATGATAC ATCTCTTGA GCGCCTCACT TCACAATAGG GATCCATTCA	180
TTGGCTTCCA GATGATGTTACAGTTCTAG TAACACTGAT ACTGACTTTG TTCCCTTATGT	240
TTAGACAGCT TCTCTGTCTA TACTTCTCAG AAACACCATC AACCAAGAAC GAGCCACTTA	300
TTATCCACAA AAGTTGCATC AACAGCTTA CCTTCTGGGA GGGATGGATG GTACCCAAAT	360
ACTCAAACCTG AATCCCTATAG TGTGGAGCAA CCAAACAGAA AACAGTCCAA GGATTCAAGGA	420
AATGGTAAAA ACATTTAAA TCTAAATAGT AGTTATTTTC ATTTGTTCT GCTCCCACCT	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCGCGG CCGCGTCGAC ATGAGTTAA TTTTTTTT TTTTTTACA CTTTACATAG	60
AAATAGGATT ATGTGGGCTG GGCACAGGGG CTGACGCCG TAATCCAGC ACGTGGAGC	120
TCGAG	125

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTGGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC	60
TACTGTGTG GGATTCAAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAACCTTA	120
AAGGAAGTCT CCCTTACAAA GGCCAGCTG GGGTTAGAAC TGGAAGAACT AGAACAGCA	180
GCACGTCTG TCCAGGAGGA AGAAAATGCA TTAAAAGCAG CCCATTCACT TTCTGGCAG	240
CAGACACTTG GCTCAGCTC TGAGGCAAGT GATTGGGAGG ACTCAGACAG CAGCGTGTCA	300
TCTGGAAACG AAGACTCAGG CTCAGATTCA GAACAAGATG AACTCAAAGA TAGTCCATCT	360
GAGACAGTCA GTTCTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT	420
GATGGTGGAG TACGAGAAA CACAGCCATC CAGGACTCTG ATGCCAGTC GGGAAAGCCA	480
CTTGCCTCTT CCTGGCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGGAAACAA	540
CTGAAGACTA CAGGTCAGGT TTCTGAACCC AAGGGCACCA CTGCTGTAAA CCGCAGCAAT	600
ATTCAAGGAGA GAGACGGCTG TCAGACACCA ATAATTGAC TCTTAGGTGG TTTTATTCAT	660
TGTTGAGAAA TATGGTAGAT TGGGTTTCAT TTACCGAATG AGAATTCTTC ATTTCACTT	720
TGTAATTTT CTTAGTATAT AGTCAGCCCCA CACTCTCGAG	760

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

GAATTCGCGG CCGCGTCGAC CATTTCGAGA GTCCGTCTTG TAAATGTTTG GCACTTGCT	60
ACTTTATTGC TTCTTCTGG CGACAGTTCC AGCACTCCC GAGACGGCG GAGAAAGGCA	120
GCTGAGCCCG GAGAAGAGCG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCCTTCC	180
CGCCCGCTAT TTCTATATTG AGGCAGTGGA TACATCAGGG AATAAATTCA CATCTTCTCC	240
AGGCAGAAAG GTCTTCAGG TGAAAGTCTC AGCACCAAG GAGCAATTCA CTAGAGTTGG	300
AGTCCAGGTT TTAGACCAGA AAGATGGGTC CTTCATAGTA AGATACCTCG AG	352

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGCGG CCGCGTCGAC TCTAGGTTT CTGATTTGA TGGTAATATG GTATTCTGGG	60
AAATATCTGT CCAAATTATC CTGATCTCTG AACTCCCTG GTTGAGGTCA GTCACITTCAC	120
ACAATACCAT GATGACAGCT TTATCAAGCC AGATGCTTAG TCAGAGCTTT CCAAGACCCA	180
GCTTGGTTT TATCAGCAAA ATCCATCCCT CCCACCCCCC ATACACACGC CAGTTGAGA	240
CTCCTCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TGGACCTCCT GTGCAAGAAC	60
ATGAACCACATC TGTTGTTCTT CCTTCTCCCTG GTGGCAGCTC CCAGATGGGT CCTGTCCAG	120
GTGCAGGTGC AGCAGTCGGG CCCTAGACAG GTGAAGCCTT CGGAGACCCCT GTCCCTCAGT	180
TGTACTGTCT CTCTCGGCCG CATGAATGGT CATTACTGGA CCTGGATCCG GCAGACCCCC	240
GGAGGGAGAC TGGAGTGGAT TGGATCTGTC TATTATAATG GAAACAGAGT GTATCACCCC	300
TCCCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGCGG CCGCGTCGAC AATTACTACC ATTGTTAAGT GTCTCTTTAA CTAAACTCAT	60
TGTTTAAAG TTTCTCCCT CTCTGTTCT AAATCCAAAT TTCTGCTCTG GAATATATGT	120
TAGAAGAGAT ACATTGTTG GAATGTTG ATTTCTTTA TGAAATGCAG TATCTTTGG	180
GGAATATTAT GTAAATGAAA TACCAATTAT TTTAAAGAG CATTTTGTTG TGACATAGTG	240
CTTTCACAAA CTAAACTGG AATTCTTTTC TTTAGTCTAT CTATATCTTT TGAAAATGTT	300
GACACAGCTA AGAAGAAGCT GCCTGTTCAT ATCTTAGATG GTCTGACCCCT CAGCTACAAAG	360
GTATATGCTG ATATTCCCTG TATGAACCGT GTTTCTGCT AACATTAAAA CATGCAAGTA	420
ATTGGTTACT TTCTAATTCTT GTTTTGTTT CATAGGTCCC ATGGCCCGTG GACATTGTTA	480
TAAGTTGGA ATGTCAAAAA ATTCTATAATC AAGTGTCTCT TCTCTTATTG CAAATAAAAGT	540
GGGCATCCTC GAG	553

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTTCGGG CCGCGTCGAC	TTTATTTCAAG TGGATTCTCT	AGGATTTCT ATATAAAAGA	60
TGTCATCTGA TAGAGTAGTT	TACTTCTTCG	TTTCCAACCT GAATGGCTTT	120
CTTCCCTAAC TGCCCTGGCT	AGAACCTCCT	TTACCACGTT GAATGGAAGT	180
AACATCCTTG TCTTGTTC	GATTCGAG		209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTTCGGG CCGCGTCGAC	AATGGCTTTT CTTCCCTCCT	GGGTTTGTGT ACTAGTTGGT	60
TCCTTTCTG CTTCCCTAGC	AGGGACTTCC AATCTCTAG	AGACAGAGCC CCCTCTGTGG	120
AAGGAGAGTC CTGGTCAGCT	CAGTGACTAC AGGGTGGAGA	ACAGCATGTA CATTATTAAT	180
CCCTGGCTAT ACCTTGAGAG	AATGGGGATG TATAAAATCA	TATTGAATCA GACAGCCAGG	240
TATTTGCAGA AATTTCGACC	AGATAATGAA CAGAATATT	TATGGGGTTT GCCTCTGCAG	300
TATGGCTGGC AATATAGGAC	AGGCAGATTG GCTGATCAA	CCCGAAGGAC AAACGTGGC	360
TATGAATCTG GAGATCATAT	GTGCATCTCT GTGGCACAGT	GGTGGGCTGA TTGAAATTAT	420
TTTCTGTCTT CATTACCCCTT	TCTTGCTGCC GTTGATTCTG	GTGTAATGGG GATATCATCA	480
GACCAAGTCA GGCTTTGCC	CCCACCCAAAG AATGAGAGGC	TCGAG	525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCCGGCC TTCATGGCCT	AGGCTCCTAA AATAAATAAT	CCACATAATT GTAAATGAAA	60
CACATCAAGG ATTTCGAGTTA	ATAGCCTCTG AGCAGCATTA	ATATAGCCAT TAGACTGGAG	120
TATTTGTTAT CAAGAGGGCC	AGAGAAACCCA CGCGCTAAAGC	CGTAGGGTGG GAGGAACCCCT	180
GGATTGCAGC TACATGGCTT	ATGTAGGGAG TTTGTAACAG	CCCCAAGCTG AAACCAAGCTT	240
CTACACCCAT GACTGTTGAG	TGATTGAATT CTAGACCTGC	CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTTCGCGG	CCGCCTCGAC	CAACAAGAGC	ACTGGCCAAG	TCAGCTTCTT	CTGAGAGAGT	60
CTCTAGAAGA	CATGATGCTA	CACTCAGCTT	TGGGTCTCTG	CCTCTTACTC	GTCACAGTTT	120
CTTCCAACCT	TGCCATTGCA	ATAAAAAGG	AAAAGAGGC	TCCTCAGACCA	CTCTCAAGAG	180
GATGGGAGA	TGACATCACT	TGGGTACAAA	CTTATGAAGA	AGGTCTCTTT	TATGCTCAAA	240
AAACTAAGAA	GCCATTAAATG	GTTATTTCATC	ACCTGGAGGA	TTGTCAATAC	TCTCAAGCAC	300
TAAGAAAGT	ATTTGCCCCA	AATGAAGAAA	TACAAGAAAT	GGCTCAGAAAT	AAGTCATCA	360
TGCTAACCT	TATGCATGAA	ACCACTGATA	AGAATTTATC	ACCTGATGGG	CAATATGTGC	420
CTAGAATCAT	GTTTGTAGAC	CCTTCCTTAA	CAGTTAGAGC	TGACATAGCT	GGAGAGATACT	480
CTAACAGATT	GTACACATAT	GAGCCTCGGG	ATTTACCCCT	ATTGATAGAA	AACATGAAGA	540
AAGCATTAAAG	ACTTATTTCAG	TCAGAACTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTTCGCGG	CCGCCTCGAC	TGAAAGTAG	GTTTTGAAG	AGATATATTC	GAAATATATT	60
TTTCACTTG	AAAAAAAGTAA	AAATTTTTT	CAAAGCAAA	TAATTCAACT	CTAAAATTAT	120
ACTATTTCAA	CATTCTCATT	TATGTGAAAG	CATGTGATAA	ATTGTTGCTG	CGTCAGAGAT	180
ATGAGAAACT	CCTTGCATT	AGGTGGGCAT	TATTCACTAGA	CTTCTACATG	AAAGAGAAGA	240
GAAATAAAAG	ATGCACCAGG	ATTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTTCGCGG	CCGCCTCGAA	CCCAGCAAAA	TGGGATCTC	CACAGTCATC	CTTCAAATGT	60
GTCTTTATG	GGGACAAGTT	CTATCTACAG	GTGGGTGGAT	CCCAAGGACT	ACAGACTACG	120
CTTCACGTAT	TCCCTCGGAG	GTGCCCTTGG	ATACAACGTG	AGCAGAAAGT	TCTCCATTTC	180
CCTCGGAGTT	GACCCCTGGAG	TCAACTGTAG	CAGAAGGTTTC	TCCGATTTC	TTGGAGTC	240
CCCTGGAGTC	AACGTGTAGCA	GAAGGTTCTC	TGATTCCCTC	AGAGTCACCC	CTGGAGTC	300
CTGTAGCAGA	AGGATCTGAT	TCTGGTTTGG	CCCTGAGGCT	GGTGAATGGA	GATGGCAGGT	360
GTCAGGGCCG	AGTGGAGATC	CTATACCGAG	GCTCTGGGG	CACCGTGTGT	GATGACAGCT	420
GGGACACCAA	TGATGCCAAC	GTGGTCTGTA	GGCAGCTGGG	TTGTGGCTGG	GCCATGTCAG	480
CTCCAGGAAA	TGCTCTGGTTT	GGCAGGGCT	CAGGACCCAT	TGCCCTGGAT	GATGTCGCT	540
GCTCAGGACA	CGAATCCTAC	CTGTGGAGCT	GCCCCCACAA	TGGCTGGCTC	TCCCATAACT	600
GTGGCCATGG	TGAAGATGCT	GGTGTATCT	GCTCAGCTGC	CCAGCCTCAG	TCAACACTCA	660
GGCCAGAAAG	TTGCTCTGTC	AGGATATCAC	CACCTGTACC	CACTAGACTC	GAG	713

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 925 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(iii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

GAATTCCGCC	AAAGAGGCCT	AGAATAATGC	ATATACTGCC	ATGTCAGATT	CCTACTTACC	60
CAGTTACTAC	AGTCCCTCCA	TTGGCTTCTC	CTATTCTTG	GGTGAAGCTG	CTTGGTCTAC	120
GGGGGGTGC	ACAGCCATGC	CCTACTTAAC	TTCTTATGGA	CAGCTGAGCA	ACGGAGAGCC	180
CCACCTTCCA	CCAGATGCAA	TGTTTGGGCA	ACCAGGAGCC	CTAGGTAGCA	CTCCATTCT	240
TGGTCAGCAT	GGTTTTAATT	TCTTTCCCG	TGGGATTGAC	TTCTCAGCAT	GGGAAATAA	300
CAGTTCTCG	GGACAGTCTA	CTCAGAGCTA	TGGATATAGT	AGCAATTATG	CTTATGCACC	360
TAGCTCTTA	GGTTGAGCCA	TGATTGATG	ACAGTCAGT	TTTGCCATG	AGACCCCTCAA	420
TAAGGCTCT	GGCATGAATA	CTATAGACCA	AGGCATGGCA	NCACTGAAGT	TGGTAGCAC	480
AGAAAGTTGCA	AGCAATGTT	CAAAGTTG	AGGTTCTGCT	GTTGGTAGCG	GGTCATTAC	540
TAGTAACATC	GTGGCTTCCA	ATAGTTG	TCCAGCCACC	ATTGCTCCTC	CAAACCAGC	600
ATCTTGGGCT	GATATTGCTA	GCAAGCCTGC	AAAACAGCAA	CCTAAACTGA	AGACCAAGAA	660
TGGCATTGCA	GGGTCAAGTC	TTCCGCCACC	CCCGATAAAAG	CATAACATGG	ATATTGGAAC	720
TTGGGATAAC	AAGGGTCCCG	TTGCAAAGC	CCCCTCACAG	GCTTTGGTC	AGAATATAGG	780
TCAGCCAAACC	CAGGGTCTC	CTCAGCCTGT	AGGTCAAGCAG	GCTAACAAATA	GCCCACCAAGT	840
GGCTCAGGCA	TCAGTAGGGC	AACAGACACA	GCCATTGCC	CCACCTCCAC	CACAGCCTGC	900
CCAGCTTCA	GTCCAGCAAC	TCGAG				925

(2) INFORMATION FOR SEQ ID NO:1358:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

GAATTCGCG	CCCGCGTCGAC	AAATAAACCC	AGCAACTTCA	TTCATTTGCC	TTATGTTAT	60
TGAGGGCCTG	CTAGTGCTGG	GCACACTGCT	AGGCCCTGGG	AATTATTTAG	TGAGCAAAAC	120
AGCAAAATCT	CTGTCTCAT	GGAGCTCAC	ATATAGTAGG	GAACGACTCG	AG	172

(2) INFORMATION FOR SEQ ID NO:1359:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

GAATTCCGCC	AAAGAGGCCT	AAGTCAGTGA	GGTGGAGTCC	GTTTTGAGG	TCACGCGGCT	60
AGTAATTGGA	GCCTCGTTTA	GAACCAAGTC	AGTCTCATTC	CAGAATCCAG	AACCAAGTGAT	120
TTGTAACTGA	TGCACTTGTC	TCCAAAGGGA	TCCAGCACTG	GGTTTTCTCA	TTTTAAATGC	180
ATCCATTCT	AAAAGCTCT	GTTCACAGTC	ACAAGGTGTA	CTTTTTAAAG	GAACACAGCA	240
CACAAATGTG	ACCGCTAGTG	GACAGCAGTG	GCAGCCAGT	TGGATGGCAG	AGCCTGGCAT	300

GGCGACTGGG ACAGAACGCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC	360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTCACGCGG GGTTCAAGAAA GAAAACCTCG	420
CTATCTTACA TCTCCTCTCC CCTGTTATT TGACTAAAGT GAAGTTCATG TGGCTTGAGC	480
CTCGTTTCCCT GGGGAATCA GCCTGGCTTA GGATTCATT GTCTTCTGGG ACTGGGAAGA	540
TGTGGAAGGC TGACCTCAG CCCAGCTGAA GGTCACCTC CCAGACTCTG AGCTCGGCTG	600
CCTCTGCAT CGCCACGGCT GGAGGCCCTG GCCCAGGGCG TGGCTGCATG CTGGCTTCC	660
ACTGTCTCGG TGTCCCTGCT GCCTGTCAGT AATGTCCCCA GCACCTCTG GTGTCATGTC	720
CCCTCTTGTT TGTGATTCTT TTCCCTGAGCT AGTCCATTCTT CTACCTCGAG	770

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

GAATTCTGGCC AAAGAGGCCT ACTCAGTGGAA AACCTTTAAA CCCTAAAATC CAGGAAAAGA	60
AAATAAAATAC ATTATCATGG ACCTGAGGGAA TTTTTACCTTG TTGGCTGCTC TGATTGCTG	120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC	180
TGAAAATGTG CCCATAGGAA ACATACAAA GGATCTGAAC ATTTCTCACA TCAATGCTGC	240
CACAGGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTCTT AAAGCTGGGG ATGCCCTTT	300
GGTGAAAGTA TCCAGCAGCA CTGGGGAAAT TTTCACAACC TCCAACAGAA TAGACAGAGA	360
AAAACTCTGT GCTGGCCCT CATATGCTGA GGAGAATGAG TGTTTCTTTG AACTTGAGGT	420
GGTGATCCTC CCCAATGATT TCTTCAGGCT GATCAAATA AAAATAATTG TCAAGGATAC	480
CAATGATAAT GCCCCCAATC TCGAG	505

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

GAATTCTGGCC AAAGAGGCCT AAATTTGTTCTCTCAAACAGA AGAAGACCTT AGGTACAGAT	60
GACCCCAGGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG	120
TGTCAATTGCA GCCACTGCAA TGAACATAAC ATGCAAGAAA TGTCAGAAT GTGTCAGA	180
ATTGCCCCACT GGTGTCTGTG ACCCCACAGA GGACTGCCCC AGGCTTCAC	240
TTTCCCTTCCC CATGGATTGA GCAAGCTCCC AGGGCAGGAT GGGTGGCCAG GAGGGCAGA	300
ACGGCTGGCGG GGACGGGGAA GCCAAAGTGTG CACAGGACCA TCCACCCAG CTGCAGCCAC	360
ACTGCAAGAC GGCGGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA	420
GCCCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTCAC TCACTCGCGT GTGTGACACA	480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCTC CCCCAATCTC ACCCTCTCAC	540
CACGCCCCCTC GAG	553

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 855 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

GAATTCGGCC	AAAGAAGCCT	AGTCAACTTG	ATCCAAACCT	GTTGGTGAAG	CAGCAGACTC	60
CACCATCTCA	GCAGCAGCCA	CTCCATCAGC	CAGCCATGAA	GTCTTCCCT	GACAATGTCA	120
TGCCCCACAC	TACACCTGAG	CTGCAAAAAG	GGCCATCACC	AATAATGCT	TTCAGCAACT	180
TCCCTATAGG	CTTGAACCTCA	AACTTGAATC	TAAATATGGA	TATGAACAGT	ATTAAAGAGC	240
CACAGTCCAG	ACTAAGGAAG	TGGACGACAG	TGGACAGCAT	TTCTGTGAAC	ACATCTTGG	300
ATCAAACATC	CAGCAACAT	GGTGCATT	CAAGTGTGTT	CAGGCTGGAA	GAGTCTCCAT	360
TTGTNCCCTA	TGACTTTATG	AACAGCAGTA	CTTCACCAGC	CAGTCCCTCA	GGTTCAATAG	420
GAGATGGCTG	GCACAGTGC	AAATCGCTA	ACGGCTCTAG	CAGTGTAAAT	TGGCCACCAG	480
AATTCGTCC	CTGGTGAGCC	ATGGAAAGGT	TATCCAACAA	TTGACCTCTG	AACTGACCT	540
TACGTCACTC	CTGGCAGTGT	CATAAACAA	CTTCAATT	ATACTGTGCG	GGAAGTTGAC	600
CACCTCAGGG	ACAGGAACAG	TGGGTCTATCC	TCATCCTGA	ACACCACGCT	GCCTTCAACT	660
AGTGCCTGGT	CATCCATTG	TGCCTCCAAC	TACAACCTTC	CCCTCAGCAG	TACAGCACAA	720
AGCACTTCAG	CCAGAAATAG	TGATTCCAAA	TTGACATGGT	CTCCTGGTTC	AGTTACAAAC	780
ACCTCTCTGG	CTCATGAGCT	GTGGAGGTC	CCTTGCCAC	CTAAAACAT	CACTGCTCG	840
TCCCAGCACC	TCGAG					855

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

GAATTCGGCC	AAAGAGGCT	ACAAAAAGTA	CATAGTAAGA	CTAAGATACC	AAGTTGTATA	60
CTAAATTTT	TCAGGCCCTG	GGCCTCAAAT	ATATATATT	ATATATAATA	CTCCAGTGTG	120
AACAGCAATT	CGATGAAATG	TAAAATGTAT	CTTTTTTTT	TTAAATCACA	CACAAGTATT	180
CATAACCACA	GGGTTCCACCA	GAATCTAA	GCAAGGAGAC	ACTCACTCAT	ATAGAAATGG	240
AGTTACTCTT	CCACAGATCG	TTCTGATCAA	AGGTTTTGGA	ACAGAAATGA	ATTATGATT	300
TTTTGTATA	ATATCCAACA	TGTCACAT	CAAATACATT	TAGTATGAAA	AAACAGATGA	360
AGAAAAGGAA	CATACATTAG	GACAAAGTAT	CTGGTTAAA	TGCTGTCAT	TTAAATAAAG	420
CCCACTCTCC	TTACTTTAGA	GCTCTTGGT	GAATGGAGG	TGAGTTGAT	GGAGTGCAGT	480
TGATGACCAC	TGAAAAACAC	GAGCCCTTTC	AAACATGTG	CAACACTGT	AGTTTTGGT	540
TTAAACACAC	ACACACACTC	ACAAATGCTA	AGTGTACACT	ACCAAATTCT	GGGGTCAGCT	600
TTTCCAAGAA	CTACTGGGA	AACTTCAAT	GCTGCAATC	CTCGAG		646

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

GAATTCGGCC	TTCATGGCCT	AATGGCTTAG	CTGAAGGAAA	TGCTCCAGAA	ATTGGACTGT	60
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GTAAACCACATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG	120
CATAATTGGA GCATTTGCAT TAATCAACAA AACTCACATG AGACAAAAGT TAGTTTTACA	180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC	240
TTTGAAAGT AGTTACTTG AAACTTGTAA AGGTATTACA TTTTTATATT TAAACACCTA	300
TAGAGATCTT CAATTCCTTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGATCATAA	360
TCTGTCTTT GTGAAACATT TTGAAAATAT GTATATATAA TATTGTATAT GCAAATTGTG	420
TTGTTTCACT TGTAAGGGA AAAGGCTTAT TTTTCTTAT ATTCTGATA ACTTGTGTTTG	480
CATATGACCG GCACCTCTCG AG	502

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGGAAAGGCGA AGAAAAGAAT AGAGAAGATA	60
GGGAAATTAG AAGATAAAAA CATACTTTA GAAGAAAAAA GATAAATTAA AACCTGAAAA	120
GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA TCGATTGAAT	180
TCTAGACCTG CCTCGAG	197

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

GAATTCGGCC TTCATGGCCT AGGCCTGGGG TGGGACATTT TGTTTGTGAG AAGCCTGGAC	60
AAGAGGACGA GGTGCACACC ATGTCAGTCA CGGATTGTG AACTCACAGG AGAGGGTTGG	120
ATAGGGCTG TGAAACGTGAG CCCGCCTGT AGACGATGTG AAGCTGTGGT AACGGGTGGG	180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGGTTGGATA GGGCATGTGA ACGTGAGCCT	240
GCAATGTAGA CGATGCGAAG TCGTGGTAAC GGGTGGCTT GTGACGGCAC CCGCTGCTTG	300
CAGCTTAACT CGAG	314

(2) INFORMATION FOR SEQ ID NO:1367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GAATTCGGCC TTCATGGCCT ACTGGTCCCC TTTTTCTATT GCAGTGGTCA TCATTTTAT	60
TGATGTATAA TAATATTGTA TCATAAATCT TCATAAATG TGCTTCCAAA GTTTTTCTA	120

ATTTTCACT AACCTTGAT TTGGTATTTA ATTTTAGTT GTCAGAAGTT TTTAATATTT	180
GTATCATCAA AGCTATCAGG TTATTAAT TGACTTCTCA TTTAGACATA CTTAGGCCAT	240
GAAGGTCGAG	250

(2) INFORMATION FOR SEQ ID NO:1368:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA	60
TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCA CAAGTACAGA TGGAACCTGT	120
CTTGTGAATT AACATCCTGA CTACTTTGT TGATCATCAC ATTTTTCCCT CATGAGAGAA	180
ATAATAGTGT TTATAGGCT CCTGAGAATA GGTTTACTAA AGTCATCGAG ATCTGGGTTC	240
AAATGACACT TCATGCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:1369:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 408 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTGGCC TTCATGGCCT AGTTTTGTGT TGTTTTTTTTT GGCAAGAACAA	60
GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT	120
GGATATAGAT CACTATTCA GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAAACAGTT	180
ACTGAGCAAT AGGGTGGTTG STAAGGGGGA GGGATTTTT TCTGAAAGAT GGGAGAAATT	240
TTAACACATACT TAAATTTGAT GGGATAAGCC ATGCACTTAT AGGCATTTCAG TCAATATATA	300
TTTACACAAAT GAATGAAAGAT AAATTAGGGA GAGGTTAATT GGAGATTTA GGAGAGAGGG	360
AAATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG	408

(2) INFORMATION FOR SEQ ID NO:1370:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 369 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCG CCTGCCATGC AGAAAGTCAT	60
GTATAAGGGA CTCGTCCCCG AGGATAAAAC ATTGAGAGAA ATAAAAGTGA CCAGTGGGGC	120
CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTA GCAGTAAACA CACCCAAAGA	180
TGCTGCGCAG CAGGATGCCA AGGCCGAAGA GAACAAGAAG GAGCCTCT GCAGGCAGAA	240
ACAAACACAGG AAAGTGTGG ATAAAGGAAAC ACCTGAAGAT GTGATGCCAT CTGTTAAGGG	300

GGCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAT CTGGAGGAAA	360
AGTCTCGAG	369

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCCGCC AAAGAGGCCT ATTTTTTTT TTTTTAACGT ATAGATGGTG CAGCATGTCT	60
ACATGGTTGT TTGTTGCTAA ACTTTATATA ATGTGTGGTT TCAATTTCAGC TTGAAAAATA	120
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTCTGCT	180
TTGAATCCTT GATATTGCAA TGGAATTCCT ACTTTTAAAT ATGTATTGTA TATGCTAGTT	240
ATTGTTGTCG ATTAAACTT TTTTGCTTT CTCCCTNTTT TTGGTTGTC GCTTCTTTT	300
ACAACAAGCC TCTAGAAACA GATAGTTCT GAGAATTACT GAGCTATGTT TGTAATGCAG	360
ATGTACTTAG GGAGTATGTA AAATAATCAT TTTAACAAA GAAATAGATA TTTAAATTT	420
AATACTAAT ATGGGATCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCCGCC AAAGAGGCCT ACTTCCGGCT GGAGCTGCTG GGCGCGGGAC CTGGGGCGGT	60
TAATTTGGAG TGGCCCTGAG AGTCAGTTTC CTACACCAC CGAGGCCCA CCCAGCACGA	120
GCTACACCTT CCACCAAGGAG GGCGCTGGAAAC CCTCAGCTG CACTTCCTCA ACCCTCAGGA	180
AGCTCAGCGG TGGGCAGTCC TAGTCAGGAG TGCCACCGTG GAAGGACAGA ATGGCAGCAA	240
GAGCAACTCA CCACCAAGCCT TGGGCCAGAG AGCATGCCCT GTCTCCCTGC CCAGTCCCCC	300
GGAAGCCTCC ACACCTCAAGG GCCCTCCACCG TGAGGCAGAT CTTCCTAGGA GCCCTGGAAA	360
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCGG GCTATTGCAG GTGGAGACGA	420
GAAGGGGGCA GCCCAAGTGG CAGCCGTCTT GGCCAGCAT CGTGTGGCCC TGAGTGTTC	480
GCTTCAGGAG GCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTACACAC TTGAAGACGC	540
TGCTCTGCCC GCATCCGCGG CGTCCTCTGC ACACGTTGCC CTGCAGGTCC ACCCCCCACTG	600
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAAGAGCTC GGTTTCCCGC CAGCCGTGCA	660
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTGCCT CTTACGGGGT	720
TCGGCAGGAT GGGGACCCCTG CTTTCCTCTA CTTGCTGTCA GTCCTCGAG	770

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

GAATTGGCC	AAAGAGGCCT	AGTCTCTTG	AAGATCTCA	GGAACCTGCT	TTATGAATCT	60
TCATGCTCCT	GTGTTGGATG	CATATACATT	TAGGATACTT	AGGTTCTCTT	TTTGAATTGA	120
AACTTTACC	ATTATGTAAT	GCCCTTGT	GTCTTTAAA	ATTTTGTG	GTTAATATC	180
TGTTTGTCT	AAAATTAGAA	TTTCAGCCTC	TGCTTTTTT	CTGTTTCCA	TTTGCTTAAT	240
AAATTTTCT	TCATTCCTT	ATTTTAGCC	TATGGGCTC	ATTGGATGTG	AGATTCATCT	300
CTTGAACACT	GTACTACTGG	TTCTGCTTT	TTTACTCAGC	TTGTCACTCT	GTGCTTTCA	360
ATTGGCATT	CAAGGGTAGT	GTGATATGT	GTGAATTGT	TTCCTGTCATC	ATGTTATTAG	420
TTGTTTATTA	TGCTGACTTG	TTTGTGTGGT	TCCTTATAG	TGTTACTGGT	CTGTCACCTT	480
AAGTGTGTTT	TTTAGTAGC	AATATTTCT	TTTCATATGT	AGTGTGTTAT	GCGAGGTATT	540
TTGCAAGGAT	TTTCTGAATN	NTCNGAATT	TTATGTGGC	AAAATAGGG	GCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

GAATTGGCC	AAAGAGGCCT	AGCCTCCCAG	TGTGAGCCAC	CGCACCCAGC	CTGGATTGTT	60
GAATTCATG	CTTGGGTAC	CTCCAGATTG	ATTTTACAG	TCTTTCATGT	TTTGGTCATA	120
TGACATTGTA	TTTTGCTGCC	ATATGACTGA	TCTTTTTTG	TTAAATGTGA	GATACTTGTT	180
AAAAAAATGTT	TAGCAATGAA	TTGAGGGCTA	GTAGCATGTT	ATCTTGCCTG	AGAACAGATG	240
GGAGTCTACT	TCTGGGGGAT	GGTCAGGGGT	CCTCCATACA	GGCTGCAATT	GAAGTCGTCG	300
GTGCAGGCTC	AGTCCCTACA	AAGGCCAGGG	TATTCCTGT	CCACCTTAT	TCTGATGCAT	360
GACTCTCTG	GGTCTCAACC	AGAGCCAGTG	GACTTCAGTA	TGGTCGCTT	TCATTGGCAG	420
ACCTCAATC	CACTTGT	TTTCCATCA	CCACTCGAG			459

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

GAATTGGCC	AAAGAGGCCT	AATGGATCTC	ATGTGCAAGA	AAATGAAGCA	CCTGTGGTTC	60
TTCCCTCTGC	TGGTGGCCGC	TCCCATGATGG	GTCTCTGCCC	AGCTGCACT	GCGGGAGTCG	120
GGCCCCAGGAC	TGGTGAAGCC	TTCGGAGACC	CTGTCCTCA	CCTGCTCTGT	CTCTGGTGGC	180
TCCATCAGCA	GCAATAGTTA	CTCCCTGGGC	TGGATCCGCC	AGCCCCCAGG	GAAGGGGCTG	240
GAATGCATTG	GGAGCATCTC	TTACAGTGGG	AGCACCTACC	TCACCCCGTC	CCTCAAGAGT	300
CGAGTCACCG	TTTCCGTAGA	CCCGTCCAAG	AACCAGTTAT	CCCTGAGGCT	GAGCTCTGTG	360
ACCGCCGAG	ACACGGCTGT	GTATTATTGT	GCGGGGGGGT	CTCCGGCGA	TTATTCCTAT	420
GAGAATAGTG	ATTACCCCGA	CCCCCGTAC	TATTTAGACT	CCTGGGCCG	GGGAACCCCTG	480
GTCACCGTCT	CCTCAGCTTC	CACCAAGGGC	CCATCCGTCT	CCCCCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

GAATTCCGG	AAAGAGGCCT	AATGACTCAG	AAGAAAAG	TTACTTTACC	ATTTTGT	60	
ACACCATT	TA AACTGTTTC	TGATTC	AAAC CAGTCA	ACA TTTAAGAAA	AGCAAGATCT	120	
TATATAAAAC	ACAGAAAGTT	TGATGAA	GAGTG	GTCTCCC	TT GCAAGGAGCT	180	
GCATTGAAAG	GATTGTC	CTA TTATCACAC	A TATGACAGAT	TCTTTTG	GG CGTCATGTT	240	
GTTATTGGTT	TTGTGGGATG	GATATCTT	AT GCCTTTGT	TGATCATCAA	GTCTCATTCC	300	
AACCTTATAA	AAGGTCTTAG	AAAGAAGTG	AAGAAACCA	GCCTACTCCT	GCCTTGAGT	360	
TTTGTAGCTA	TTGGCATT	AGTAGCATT	TTCTGCTGA	TTCAGCCTG	TCCCTGGAC	420	
TATTATGTTA	ATGGTTGTT	GCCACTGCCA	ATATGGTATG	CGGTTCTAAG	AGAATTTC	480	
GTATTTCAGG	ACCTTCTTGT	ATCAGTGTG	ACCTATCCT	TGAGCCATT	TGTGGGTAC	540	
CTGTTAGCCT	TTACCCCTGGG	AATTGAAGTA	TTAGTTCTCA	GT	TTTTTCTA	CCGCTATATG	600
CTTACCGCTG	GACTTACTGC	CTTGCAGCT	TGGCCATT	TC	ACTCGGCT	GTGGACTCGA	660
G						661	

(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

GAATTCGCG	CCCGCGAC	AAAAAAGGTA	AAGATGTTGC	TGTATGCAA	ATGGACCAA	60
GTTATGTTA	TTCAAGTTGC	CTGAGAAC	TTAGTGTCT	ATAGCCACAA	ACTCGAG	117

(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

GAATTCGCG	CCCGCGAC	CTTAAATT	AAACTGGCCT	GGTTGCCT	TTTTATCAAG	60
AGAGCTTAAC	AGATAAAA	TGAAATTAGT	CTATTTCTA	CTTGCAGCA	GTCTCGAG	118

(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTTCGCGG CCGCGTCGAC ATTTTATATA ATATTTAAA TAAGTTGTG TACAAAACAA	60
AGATTTGACT GCATTTGAT TGTGACCCCC TTGCATGAAG TCAGGTGTGG AGTTTCCAC	120
TTGGGGTATC ATGTTGCTGC TGCTCAAGAA GTTTCTGATT TTGAAACATT TTGGATTTG	180
GATTTCACAA TTGGGGATAC CTAATGTGAG AGAGACTAGG CCACTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTTCGCGG CCGCGTCGAC GTTGGGGACA TGGTGGGTCT GAGAAAAGTG TTGCCGCAA	60
CTTTCTATCT GGCAATTCCCT CGCGAGGAAA TAGAATGCCG GCTCTCCGAC AGCATTTCCCT	120
GTAAACATCCG CGAACATCGAG	140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTTCGCGG CCGCGTCGAC TCTCAGAAGA GGTTTGTAA ACTTCTATAA ATACAACCAC	60
TTCATGCGTT GGCAATCTCCCT TGAGAAAAGG CTTCTCGAG	99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCCGGCC AAAGAGGCCT AGTTTAAGTG CTGTGGAGTA GTATATTCA CTGACTGGTT	60
GGAAATGACA GAGATGGACT GGCCCCAGA TTCTCTGCTGT GTTAGAGAAAT TCCCAGGATG	120
TTCCAAACAG GCCCACCAGG AAGATCTCAAG TGACCTTTAT CAAGAGGGTT GTGGAAGAA	180
AATGTATTCC TTTTGAGAG GAACCAAACA ACTGCAGGTG CTGAGGTTTC TGGGAATCTC	240
CATTGGGTG ACACAAATCC TGGCCATGAT TCTCACCAT ACTCTGCTCT GGGCTCTGTA	300
TTATGATAGA AGGGAGCCTG GGACAGACCA AATGATGTCC TTGAAGAATG ACAACTCTCA	360

GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTGAAACA	420
CACATCCATG GCAAACCTCG AG	442

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTGGGCC AAAGAGGCCT ATTCAAGGTGT TTTCATTTGG TGATCAGGAC TGAACAGAGA	60
GAACTCACCA TGGAGTTTGG GCTGAGCTGG CTTTTTCTTG TGGCTATTTT AAAAGGTGTC	120
CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTAA TACAGCCTGG GGGTCCCTG	180
AGGCTCTTT GTGCAGCCTC CGGGTTCATC TTTAGCACT ATGCCGTGAG TTGGTCCGC	240
CAGGCTCCAG GAAGGGGCT GGAGTGGTC TCAAGTATAA GTGACATTGG TGACACCAGA	300
TACTACGGAG ACTCCGTGAG GGGCCGATTG ACCATCTCCA GAGACAATTG CAAGAACATG	360
TTGTATTGG ACATGAACAG CCTGAGAGCC GAGGATAACGG CCGTGTATTA TTGTGCGGCA	420
AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCAGGGAA	480
TCCTTAGTCA GCGATCTCGA G	501

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTGGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTAG TCTTTTTTC	60
TCTTTGCTTT CCTGTGTTGG AATTTCTAT TTCTATATAC TCAAGTCAG AGATTCTTC	120
CTTTTCCATA TCTCTGTCTAC TAGTGAGGCC ATCCAAGGCA TTGTTCAATT CTGTTACAGT	180
GTTTTGATCT TTAGTATTTC TTTTTCATTC TTCATTACAC TTTCTCTCTG CTAACATTGC	240
CCATAAGTGC TTATATGCTG TATACATTAT CTGTTGATCA TATTGTTTT AAATTCTAA	300
TCTGATAATT CAACATCTCT GACATGTCTG GTTCTGGTTC TGATACTTGT TGTCAAACTG	360
TGGTTTTTT TCTTTAGAG TGGCTTTAA TTTTCTTTT GTTTTTGTT TTTTTTTGG	420
ATAGTTGGAC ATGACGTACT AGATAAAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG	480
GTGGTAAAGAT GTGAGAGGAA GAAAAGCATT CTGTTAGTCTC GTTAGGTTTC AGTCTTTAA	540
CCCATTATG CTTAGTGTTC TATTACTGGA ACGCTAGGCA TGTGGAAGTT ATTATATATCC	600
TACTGCTAAA GGTTATCACC AAGCTGTACT CGAG	634

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

GAATTGGCC	AAAGAGGCCT	ACTCAAGTTC	AAGGAAAATG	AAGACAAAAA	GTGATATGAT	60
GGAAGAAAAC	ATAGATACAA	GTGCCAAGC	AGTTGCTGAA	ACCAAGCAAG	AAGCAGTTGT	120
TGAAGAAGAC	TACAATGAA	ATGCTAAAAA	TGGAGAACCC	AAAATTACAG	AGGCACCAAGC	180
TTCTGAAAAA	GAATTGTGG	AAGTAAAAGA	AGAAAATATT	GAAGATGCCA	CAGAAAAGGG	240
AGGAGAAAAG	AAAGAACGAG	TGGCAGCAGA	AGTAAAAAAT	GAAGAGAAC	ATCAGAAAGA	300
AGATGAAGAA	GATCAAAACG	AAGAGAAAGG	CGAAGCTGGA	AAAGAAGACA	AAGATGAAA	360
AGGGGAAGAA	GATGGAAAAG	AGGATAAAA	TGGAAATGAG	AAAGGAGAAG	ATGCAAAAGA	420
GAAAGAAGAT	GGAAAAAAAG	GTGAAGACGG	AAAAGGAAT	GGAGAAGATG	GAAAAGAGAA	480
AGGAGAAGAT	GGAAAAGAGC	AAGAACGACAG	AAAAGAACCA	GGAGATGGAA	AAGAGAATGA	540
AGATGGAAAAA	GAGAAGGGAG	ATAAAAAAAAGA	GGGGAAAGAT	GTAAAAGTC	AAGAAGATGA	600
AAAAGAGAGA	GAAGATGGAA	AAGAACGATGA	AGGTGGAAAT	GAGGAAGAAG	CTGGAAAAGA	660
GAAAGAAGAT	TTAAAAGAAG	AGGAAGAACG	AAAGCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:1386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

GAATTGCGG	CCCGCGTCGAC	CTTTAGTGTG	TCTTTTCATT	CTCTAAAAAG	TGTCTTTGCG	60
AGAGAAAAAA	AAAATTTAA	TTTGATGAA	ATCCAACTTA	TCATTTTC	TTCTGTGGCC	120
CCTCGAG						127

(2) INFORMATION FOR SEQ ID NO:1387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

GAATTGCGG	CCCGCGTCGAC	CTCTGTTCA	TCGTTTGCT	GAATATTTAT	TAGCATTCCA	60
TCACTTGTG	TTAACATTAA	AGAAGTTGAG	TTCAAACAAAT	GTTTTAA	TTCACACAAA	120
TACTCGAG						128

(2) INFORMATION FOR SEQ ID NO:1388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 816 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

GAATTGGCC	AAAGAGGCCT	AGTTTCTTTT	GCTCTACATC	TTCACCAGTA	TTTGGTGTAA	60
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TCAGTGTCT	GAATTTGTC	CATTCTGATA	GGTGTGAGA	GGTATCTTAT	AATTTAATT	120
TGTGTTCTC	TGATGCCATA	TGATGTGCG	GACATCTTT	CATATGCTGA	ATTGCCATCT	180
GTATATCTT	GGTAGGGTGT	CTGTTAAGGT	TGTTGCCAA	TTTTTAATT	GGGGTGTG	240
TTTCTGTG	GAATTTAAG	AGTCCCTAC	ACTGTCTCTG	TCTGCTTGT	CTGCTGTCT	300
GTCTGTCTGT	NGAGACAGAG	CCTCGCTCTG	TCACCCAGGT	TGCAGTACAG	TGGCACAGTC	360
TTGGCTCCCT	GCAACCTCTG	CCACCTGGT	TCAAGTGATT	CTCCTGCGTC	AGCCTCCGA	420
GTAGCTGGT	TTATACCGT	GCACCAACAC	ACCTGGCTAA	TTTTTGATTT	TTTAGTAGAC	480
ACGGGGTTTC	ACTANGTTAG	CCAGGCTGGT	CTCGACCTCC	TGACCTCAGG	TGATCCACCC	540
ACCTTGGCCT	CCAAAGGTGC	TGGGANGNGA	GCCACCAAC	CCAGCCTCTT	TACACATT	600
AGTTAATAGT	TCTTATCAG	ATGTGTCTTA	TGTAATATT	TCCTCCCTAT	CTGTGGCTTG	660
TCTTTCTATA	CTCTTGACAT	TGTCTTTGTC	AAAAGACAAC	AATTTTAAG	AAACAAGTAG	720
ACAATTAA	TGAAGCTCTGG	CTTATCAGTT	CTTTCTCTCA	TGGTTGGTAC	CTTTGGTGC	780
GTATCTAAAA	GTCATCACCA	AAACCAAGAA	CTCGAG			816

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

GAATTTCGGG	CCGCGTCGAC	CTAAACCGTC	GATTGAATTC	TAGACGAAC	ATATGTTAA	60
GCAAAACAA	AAATAAAAAT	CCTCAAAAAA	AGTAATATCA	GAGTTTAAT	TTCAACCAGC	120
TGGCACAACA	ATGAAAGTGT	CAGACTTTCT	GAAAGTACTC	GAG		163

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

GAATTCCGGC	TTCATGGCCT	AAAACCTCA	AAAATAAATT	AGAATCCAGC	ACTGCTACAA	60
TATATTATCT	AAAATGTCTA	ATTCTCAAAA	ATATGAGTGA	TGCAAAGAAA	CAGGAAACAG	120
TGAAACACAG	AGGAAAAAAC	AGTGACTAGA	AACTGACTTA	AGAGTAAGCC	CAGATGTATT	180
TGGGAGCCAG	AGCCTTCAAA	GTAGCTATT	AATATGTCG	AAAAAATTAA	GGGAAATAT	240
GACAATGACT	CAAAAATAAG	GACTCTAAAT	ATAGAAATGG	GAGCTG		286

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

GAATTGGGCC TTCAATGGCCT ACTTTTAAGG GCTTGGAAAGT TTCAAAACCA CAGTCGCAT	60
GTGACAGGTG CTCACTGCTG TTGGGTTGGC CGCTGGTCT AGGCCTCTGC TGGAGTGTGT	120
GATCTGCTT CTGACCGCAG GCGGTTCAACA TGGGTGTGCT TTAATCTTAC GTCTCCGTCC	180
TCTTTTCCA CTGAGAGTGC TGGTCTCAAG GACACTGGAG ATGAGAGAAT TGGAATATCG	240
CATAATGTCT CATCTGTTT ATCTCTTGCT ACAAACATCA CAATCTAAA ATAACAATGG	300
CAGTACAACT GCCACCTATA TCATTACTGA AAACAGTGAA GATATTTTT GCCTAAGTCT	360
TCCCATTCTG TGAGTTATG CAGAGTCTCG AG	392

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

GAATTGGGCC TTCAATGGCCT AGTAATCTTT CCCCCCAGTT TTTGGATGAA GAAACTAACAA	60
CTGAAGGGCC GAGGTGGCCT CCCAGGCTCA GAGGGTGTGTT CAGAATCCAG GCCTGGTGT	120
CCTTCCACAG TACCAAAGCG CCACACATTA GTTGCTCTGT AGATTTCCA CACTTCAGGG	180
AGAAATGCCAA AGTATCTTG CCTTGACAC ACTACCTGTT CAAACACTCAG TGACGAGGGT	240
GTCGTGTGTG CTCAGGCAAC TCCCGCCCTT CTTCTTTG CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

GAATTGGGCC TTCAATGGCCT ACTGAGTTCT CAAATCTAAC GTTTAGGAA TTTTTTATTG	60
CTGCAGAGAG TTGGGGAGCT GTTAAAAGT TGGTTGGTT AGCCAGTATA GCTAGATTCC	120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGCTA GATTTCTCAT GATACTCTAA	180
ACTGTGTGAT GGCCAAAGTCC CCACTTGAA GATGTCCAAA TTCAGCCTCA GACATTCTC	240
CTCAAGAAAG GGGGGGCAA AAAGCCTTT GTGCCCTTT CCCAAATTAT TTGCTCATGT	300
CGCAAGACTG AGGTCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

GAATTGGGCC TTCAATGGCCT AACGCCATCT ACGACCTGAT CGAGCCATC GAGGATTGG	60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGACTCGTT GTGAACAGCC	120

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACCTGT	180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT	240
CCCCCTGAAGG GGGCGGTTT AAGAAGGAGA TTGTGGTGGA TGGCCAGAGT TACCTGCTGC	300
TGATCCGAGA TGAAGGAGGC CCCCTGAGC TCCAGTTGTC TGCGCTGGTG GATGCAGTGG	360
TGTTTGTGTT CAGCCCTGGAG GATGAAATCA GTTTCAGAC GGTGTACAAC TACTTCCTGC	420
GTCTCTGCAG CTTCGGCAAC ACCCCCTCGAG	450

(2) INFORMATION FOR SEQ ID NO:1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCTGGCC TTCATGGCCT ACCGTCATTC ATTGCAGGGG CCATCAAACC CCAGACAATC	60
CTATTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGGCCCTA CAACCTGTAC	120
AAGGCCAGTT TCTGTGCCCTG TCCTCGTTCT CTCCCTCTTA CTCTCCAGAA GAAAAGGAGG	180
ACTACCAAGC CCAAAACCTT CAAAAACAAG GACCATGGTA TGTCAAGGAA GGGTGCCTCC	240
TTCTTCTCA CTCTCAAACA ATCTCTATCC TTGAG	276

(2) INFORMATION FOR SEQ ID NO:1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCTGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGCGG GGTCTCAGAA ATCAGGAGTA	60
ACTCTTGAA AACTAAATAG TTTAAATCT CATCCAACCT CCACCTTAAC TACATGCCCTG	120
GTAAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA	180
TTGGCTGATG GTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA	240
G	241

(2) INFORMATION FOR SEQ ID NO:1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

GAATTCTGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT	60
TGTGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCGAGGCTGT	120
GGACCCCCCTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA	180
TATCTCCATC CGCCCTCTCC TGGAGCAGTG TGAGAACACC CATATGACCA TCTGGCTTGG	240

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTGGT TGTTTCTTAG CTTGGGAGAC
CCGCAACTCT CGAG 300
314

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCCGCC TTTCATGGCCT AGTGCACACC AAGAACCAAG TTTCAAGCTTG GTTACTGTGT	60
TGAAGACACC TTTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCAATTCTT TTTAATTGAC	120
AAAATTTTA TATATCGTGT ACAACATCAA TCCATCTGG CATCTGTATT TGTCAGGGTT	180
GTCTTAGAGG GACAGAACTA ATAGGATATA TATAAGGGGG AGTTTATTAA GTATTAACCTT	240
ATATAATCAC AGGGTCCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC	300
AGAGTGCAGA AACTGAAGAA CCTGGAGTC GATGTTCTCG AG	342

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCCGCC TTTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT	60
AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC	120
AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCCTGGCT AATCTTTGC ATTTCAGTA	180
GAGAAGGGGT TTCTCATGT TGTCAGGCTG GTCTCTCACT CCTGAACCTCA GGTGATCCGC	240
CTGCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTA	300
CTTGAGTTTT ATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT	360
GCAAGCAGAG ACCTACTGTA GTACTCTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA	420
AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTA TTAGGAAACA CCTAGGATGA	480
TATCTTAATA GACCAAAATG TGAAATGTA GAAAATAGA GATGTCAGA TGACACAAAG	540
ATTTCGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACATGCAC	600
ATGGATCTCT CGAG	614

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCCGCC TTTCATGGCCT AGTTCTATTT AAAAATAAA CAACTAGACA ATTAACATAGT	60
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TTATTAACCT ATCACAAATTG AATTTTTTTT TAATTTTCAG TCTTAACACA TTTTTAAAAA	120
TGTATTAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTGGCTGA GAATTCCAAG	180
TACTGTGGTT CTACTGTTA GTGAAAAGTAA AAATATAGAA TATGAAACCT	240
CGAG	244

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCCGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA	60
AAGAAGCCAC AGAAATGTTT AAAAACCTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA	120
AAGCACTTAA ACAGAACGAG AGGCTAATTC AGTGTACAT GAGGAAGTAG CTGTCAGATG	180
TCACATAATT ACTTTCTAA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAAAA	240
TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATTT AATGACACAC	300
CTTGGATTAA AACGGGAAAC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCCGCC TTCATGGCCT AAAAGAAAAG AGAAAAGTGT ATTTCCTGT TAGTGACATG	60
TAGTCCCTTT GTCTAGTAG GAAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG	120
TTCCTTCTGC CTACTTCCTG CAGCTCCAA TTTATCCAAG GAAATGTCTA CAACAATTT	180
GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGC TGATTTGCT	240
TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCCGCG CTTTCTCTTC CATCACACCA	300
TCTTCAGGA ATGTCATAAA ACCCACTTTG GCTAGGCAGG ATTGAATTCT AGACCTGCCT	360
CGAG	364

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCCGCC TTCATGGCCT AGTTAGGGAC TAACATTGT ATCAACAGTT GATAAATGTC	60
TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACAA GGGCACCATG	120
GAAGTTAGTC TAAAAATTAT CGCTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT	180

TAGAATTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTAACAT TTTAAATAT	240
TGAATTCTAG ACCTGCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1404:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 396 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTGTC TTCAAGTTCC TTATGTTGC CTTTCTCATC	60
TGTCTCTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTCCTAT	120
CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTAT TTTACTGTTT	180
CTTCTCTTCC CTTGTCTAT TTTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTGAT	240
TAATTCTGTT CCTCTACAAT AGAGTCGGT CCAAGCTTTC TGTCTTCTG TGTCTTCCA	300
CGGCTCTGGC TCTCTCTGCA TTATTTCTA TTTATGGAAT ACAAACTTT TACCCCTGTA	360
TTTTCTCAC TCCTCTCCAC ACACCCCCGA CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:1405:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 444 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCAG ATAAAGGATA CATTGTGCAT	60
ACATACACTG GGGAGAGGCA GACAAAAAAA CAATGTAGTT TGAGTGTGTG TGCGTGCTTG	120
CATGCGTGCA TGCAAGGCATG TGCAATATATA ATGCTAAAC ATGATAAGTA CTATTAAGAA	180
AACAGGTTAG GTTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTGCA AATTTAAAGT	240
AGGGTCATTG TGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG	300
GTTGTTGGCC ACACAGCTAT TGAGGGAAA ATGTTCCAGA TAGAAGAAC AGTCAGGGCA	360
ATGCCCTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT	420
AAAGTAAAGT GACTGAGACT CGAG	444

(2) INFORMATION FOR SEQ ID NO:1406:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 363 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTAA TTAGAAGTAG	60
GCCTGAAGTT TGCAGTGCCT TGCAAGTAACT ATTACCGAG TGATTCATAT GAGTAAGGAT	120
GTGATAGCTG CTATAAGAGC TGCAAAGTTT ATTAAGATAC ATCCCTGTCC TGGAAACACT	180

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTG TTTTGGAAAGA TACCTTCCC	240
CCAGTTATT TCATTTACA GCTTCTCCAG CCTCCTTCAG CTTCTGTCT CCCTCTTG	300
TTTTCTGTCT CAATTTCT GCCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC	60
CTCCTGTGGG AGGGTGAATT CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA	120
AATTATCCAC AAGCAGAATC ATGAGCTGTT TGAAAGGGA GTTTCCATCG CAAGACAGTT	180
TCACTGTATT TAAGCGAGAT CCTGCCCTCG TACACGATCA CCGCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 512 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC TTCATGGCCT AGGCTTCAGG AACAGAAATG TAGGCAGGCT CCCAATGG	60
GAGGTAAACA TGACCGCGTT GTTTGAAACT ACTTCATTAA TTGTAAATC AGAACCAAAA	120
AGCTCTGGCC CTCCCACTTC TCTTAGCTGA CCCTCCCTCCC CACTTACGGA TAAACAGACT	180
TTAACCTCCC TAACCCAGAA ACACCTCCAC CAAAAATGTA TGGTTATACC TTATCTAAA	240
AAGGCACCAT GCAGGCATT AAGACTGAAC CAGTGAACCTC TAAATATGTA GTAGTAGAAA	300
ATATCACTAA TCAAAACTTC CAGCATCAGA TGGTACAAAA CCCCAAGAGG ACTGGTGACA	360
TGTCCCCCGG GATGGCAACC CCAGCTCTG GCAACCCAC AGCCCAACCGG GAGCTTCAGC	420
TCTGGTCAGG TGACGGCTG CCAAAGTCTGCACACCTGG GGACAAGGAA AGGAGACACT	480
TGCTTCATTG TGCTATTCTGACCCAGTCG AG	512

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT	60
TTATCTCTTT CATTGGAGT AAAGTTGGT AGTTAGGGA CGAATTGATC AATTTCATCT	120
AAATTGAAAG ATTCAAGGTAC ATAAAGTTGT TGTTATATTA CTTATTATTC TTTTAATGTC	180

TCTGGGGTCT AGTGATGTCT CCTCTTCAG TTCTGATATT GGTAATTGT GTCTCTCTC 240
 TTTTGTCGC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 441 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCCGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT	60
GGCCCTGGAT GCTAAGGCTG CAGTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT	120
CAGCCTCAA GACACAGTG GCTGACCTGG TTTGTATAA AGATGAAAAC AGCTGTTCTC	180
AACTGGCTGA GGCCGGCCAC AGAGAGGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC	240
CACTAACGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTCAAGAAA	300
AATAGAACCA CGAACATTCAACC CCTCAGGCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG	360
ATTGCATAAC TGTTAAGAAA AAGGCAAAGC TGGAGAGAAT GCAGAGGATT CTGGTTCTG	420
GAGAGAACCT TCAGACTCGA G 441	

(2) INFORMATION FOR SEQ ID NO:1411:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 479 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCCGCC TTCATGGCCT AATTCAATTGT CTGGTCTTT ACAAAAGACA TATGCTGGCT	60
CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATTC AACTCATATA TGTCTCCAAA	120
TTTATATATT AATTCAATTATA CTGTTTCTGC TTACATTAAT CTAGCATTTGT CTTTTGGCTT	180
GCTACTGCAG TAAGTTACCT TCTAATTGAT CATTAAGTCAC ACTTTATCAA CTCACTTAAG	240
TCCAAAAGTA ATATGAGGTT TCTCTGGGT CTTAAGTTTT GCCATCCCCA	300
AATAAGCACCA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAAGT	360
GATTCTGTGAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT	420
AGGAGCTTGGACAGAACAC TAGCTATGTA TAGTGTGAGTG CTTCTCGAG 479	

(2) INFORMATION FOR SEQ ID NO:1412:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCCGCC TTCATGGCCT AGCCGATTAA TAAATATGTA TATATAACCT TTCCCTTTTT	60
GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTG	120

AAACGAATGT AGCAATAGAT GAAAAAACAT TTAAAGGCGT TTTAATGTGG CTTTTTAATG	180
AGCTGGCTTA TGCCCTGAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG	240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TAAAAAAA	300
ATGTTTTAA AGATAAGGAA CAGACTTAA GTGATGATTG ATTGCTCAT AAACGTTCAT	360
TTTGGGCTCC AGAACTAGGA ATGATGTAGA ATTTATTTGT GTGTCATTGT CTCATTAAAT	420
GCTGTAGTT CCTATGTCCT TGCCCTACCTT CTTCTCGAG AGCCTCGCAT CTGACCCCTCA	480
GAGAGTAGCA GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

GAATTGGCC TTCATGGCCT ACAGGAACAA AAAATCTAT GCTATTATCT CAAAAATGCA	60
TACTCCTTCC TACTTAAGAA TAATAAATT ATATATTATG ATATGGTAAA ATTCAACAAT	120
AATTGTATT TTCCCTAGAA TGTTTAAAGC ATTATCTAT ACCAGCTTCA GTGTCATAT	180
TACTGTAACT TCATGAAAGA CTACTAACAA TACTGGCTAT CATTATTAA TATTAAGTAG	240
TACTTGCCAG ATGCCGTTAG AGGTGCTTAA ATGCAATTCT CATTAGTCT TCGTGTGTAC	300
TACCGTTATC TTCACTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG	360
AGAAAGACGA CCTAGCTACT GCCTATTTC TAATTCCCCT GGACTAAGCT TGGAGAAGTA	420
AGAAACTATTA CTACTCGAG	439

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

GAATTGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTAGC TCCTGTCTAA	60
ATAAGTTAGT GGGCTCCAGT CTTAAACCA CTATTTCTT TATTAATTCC TCAAGTACAG	120
ACTTTGTAT GTAACCAGTC TTTTAAACC TGTGTATAAT GACTCATTAA TGAGTTGTAA	180
AATAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

GAATTCTGGCC TTCATGGCCT AGTCTTCCAA GACAGGAATC AGCAACCTT TTTTGT	60
CTGTATCACT AATTCAATTCT GTATATTATA AAAAGTTA ACCTCTCTT CCTAGGCC	120
CAGTATTGTT TTATAAATTA AAACGTTCC CAAAGTGT TCTGTGAAAC AATAGTTCTA	180
AAAGGTGCTC TAAGAAAAGC TAAGTACATG GCAAATCCA AAGTATATGT TTTATT	240
ACATTTGATG AATTTCCTT GTTTTCTC CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTCTGGCC TTCATGGCCT AGAGAGCAGG TTTTAGCTTG CATCCAGCTG TTTCTTGAGT	60
GATGTGTACA GCTTACCCCCC AAAGAGGCAA CTGAATTCA GCTGCTCTAA TACCCACACC	120
CTCAACTTAG GTTAGTCAT AATAAAAAAC AGAATGGATT TGTTAGTTCC ATTGATTGCC	180
ACAAACCTCA CCTTCTGTGT GGCGAGATG TGCTTTAGTT CTTCATGGA ATGTTACTTT	240
CAGATCTCAC AAACCTCAAA CCTAGGGCAC CACCAATGAC AAAGAGAATG CTAAATAGAT	300
AAATCCTTG CCAGGTCTTC AAGCTTCCA CTCCCCTCGA G	341

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCTGGCC AAAGAGGCCT AGCCATTATT ATTAAAAAGT AGGATTGCTA CCCGCCATT	60
CTATTAAAAA GTAGGATTGC TACCCGCCAT TATTATTAAA AAGTAGGATT GGTACCCGCC	120
ATTATTATTA AAAAGTAGGA TTGCTACCCA ACATTATTAT TAAAAAGTAG GATTGCTACC	180
CTCCATTATT ATTAAAAAGT AGGATTGCTA CCCTCCATT TTATTAAAAA GTAGGATTGC	240
TACCTGCCAT TATTATTAAA AAGTAGGATT GCTACCTGCC ATTATTATTA AAAAGTAGGA	300
TTGCTACCTG CCATTATTAT TAAAAAGTAG GATTGCTACC CGCCATTATT ATTAAAAAGT	360
AGCATTGCTA CCCGCCATTAA TTATTAAAAA GTAGGACTGC TACCCGCCGT TATTGACCA	420
GCTACCTTAT GAAAGTAGTT TCACGCTGTC TCGAG	455

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATACCTAG CTTCCATGAT TTATGATAGA TATCCTTAT TGGACCAATT CGTGTCTGTA	60
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ACCAGCCTCC	TGTTTCTACT	GCCATCCCCT	CCTCATGCAC	AGATGCCCTCC	TCCCTGGCT	120
CCTGCTCTGA	TCCCTGTACC	CAGCTTGTCC	CCTGCAAGCA	TGTTCCCTC	CCTTGCCCG	180
GCTCTGACAC	CCACACATG	TGTGGATCCC	CTCCCCCTGTC	CCAGCTCTGA	TACCCCTTGC	240
ATGTGTGGCT	GCCCTCACCC	TGGGTGTCCCT	CTTCCCTGTC	CCAGCTCTGA	CACCCACGCA	300
TGTGGGGCTG	CCCCGTCCT	AGGGTCCCCC	TCCTCTGTC	AGGCTCTGTC	CTCCCTGCGGT	360
TGGCTTACCC	ATTCTGGATG	CACCTCACAC	ACAGCCTGTG	CATCTTTGGA	TGAATTGGC	420
CTCCCTCACATC	CACTGCTGGT	GCAGATGCTT	CCTTACGGGG	CCTTCTCTGA	TGGCTTTAGG	480
GCTGAATCAT	GCAGGAAGGA	AGGAGAAGGA	CAAGAAGAAA	AGGGAAAGGCT	GGGAAGGGAA	540
CGGGTGGTA	AAATTGGTTC	ACAAGCCCTC	GAG			573

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

GAATTCTGGCC	AAAGAGGCCT	ATTTTAAAAA	AAACTATTAA	ATTTTTAAT	TTATTTTGG	60
TTGTTTTTTG	CACAATGAAG	TTTCAGCTTC	TCAACCTCT	CCCTAACCC	GGGCTGTGG	120
CCCGACTGG	CCTTGAGCCA	CAGTCCTCT	TTCCCTCC	ACCCCTTCC	CCCTCCGGG	180
ACCTCGAG						188

(2) INFORMATION FOR SEQ ID NO:1420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

GAATTCTGGCC	AAAGAGGCCT	ACGAGGAAAG	ATCTAATTAT	CATGGACCTG	CGACAGTTTC	60
TTATGTGCCT	GTCCCTGTGC	ACAGCCTTTG	CCTTGAGCAA	ACCCACAGAA	AAGAAGGACC	120
GTGACATCA	TGAGCCTCAG	CTCAGTGACA	AGGTTCACAA	TGATGCTCAG	AGTTTTGATT	180
ATGACCATGA	TGCCCTTCTTG	GGTGTCTGAAG	AAGCAAAGAC	CTTTGATCAG	CTGACACCAAG	240
AAGAGAGCAA	GGAAAGGCTT	GGAAAGATTG	TAAGTAAAAT	AGATGGCGAC	AAGGACGGGT	300
TTGTCACTGT	GGATGAGCTC	AAAGACTGGA	TTAAATTGTC	ACAAAAGCGC	TGGATTTACG	360
AGGATGTAGA	GGCACAGTGG	AAAGGGCATG	ACCTCAATGA	GGACCCGCTC	GTTTCCCTGGG	420
AGGAGTATAA	AAATGCCACC	TACGGCTACG	TTTTAGATGA	TCCAGATCCT	GATGATGGAT	480
TTAAGTATAA	ACAGATGATG	GTTAGAGATG	AGCGGAGGTT	TAAAATGGCA	GACAAGGATG	540
GAGACCTCAT	TGCCACCAAG	GAGGGTCTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:1421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GCAAGACGGC	TACTGAGGCA	GGAGAATCGC	TTGAACCCAG	GAAGCGGAGG	TTGCAATGTG	60
CCAAGATCGT	CCCACTGAC	ACTCTAGCCT	GGGCAACACA	GCAAGACTGT	GTCTCAAAAA	120
AAAAAAATCT	TNGACNAAAC	ATAGTTGTTN	ACATACTTCT	TTAATCCAG	AGTTAGTTTT	180
AAAANACCA	TGATTGCTGT	TTTTGCATAT	TATCTAGCG	GTCTAAATT	AACCTAGCCA	240
TGTGCAAGGAA	TGGGTAAAGT	CCCCTTAAAC	AAAAATGGGG	TTAGTTANGT	TAGTTCTTT	300
GCCATTTCAC	TGGTCATATA	CCTGAAGCGC	TTAGCCTGAC	ACAATTGAAC	GCCAGACGGA	360
AGCCGNGATC	ACCGGTCTG	ACGGGGTCA	GAGTCAGACC	AGGGGCTTT	TACCCAAGTG	420
GGGAAGATTG	GGAAAGGCT	AGGATCAGAG	AGGGAAATGG	GTCCCTGGTT	GCCCCATGGAC	480
CTAATGGGGT	CTCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTTCGGGG	CCCGCGTCGAC	GAGGAACCCA	GCCAAAGGACT	AACTACGCC	ATGAGATTGG	60
CAGTGATTG	CTTTTGCCCTG	TTTGGCATTG	CCTCCTCCCT	CCCGGTGAAA	GTGACTGATT	120
CTGGCAGCTC	AGAGGGAGAAC	CTTTACAGCC	TGCACCCAGA	TCCTATAGCC	ACATGGCTGG	180
TGCCTGACCC	ATCTCAGAAG	CAGAACTCTCC	TTGCGCCACA	GAATGCTGTG	TCCTCTGAAG	240
AAAAGGATGA	CTTTAAGCAA	GAAACTCTTC	CAAGCAATT	CAATGAAAGC	CATGACCCACA	300
TGGACCGACGA	TGATGACGAT	GATGATGACG	ATGGAGACCA	TGCAGAGAGC	GAGGATTCTG	360
TGGACTCGGA	TGAATCTGAC	GAATCTCACC	ATTCGGATGA	GTCTGATGAG	ACCGTCACTG	420
CTAGTACACA	ACCGACACACT	TTCACTCCAA	TCGTCCTCAT	AGTCGATGTC	CCCAACGCC	480
GAGGTGATAG	CTTGGCTTAT	GGACTGAGGT	CAAAGTCTAG	GAGTTTCCAG	GTTTCTGATG	540
AACAGTATCC	TGATGCCACA	GATGAGGACC	TCACCTCTCA	CATGAAAGAC	GCTGAGTCTA	600
AGGAGTCCTC	CGATGTCATC	CCTGTTGCC	AGCTTCTGAG	CATGCCCTCT	GATCAGGACA	660
ACAAACGGAAA	GGGCAGCCAT	GAGTCAAGTC	AGCTGGATGA	ACCAAGCTG	GAAACACACA	720
GACTTGAGCA	TTCCAAAGAG	AGCCAGGAGA	GTGCCGATCA	GTCGGATGTC	ATCGATAGTC	780
AAGCAAGTTC	CAAAGCCAGC	CTGGAACATC	AGAGCCACCG	CCTCGAG		827

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GAATTTCGGGG	CCCGCGTCGAC	GGGAGAGGAA	GGGTTGGGCA	GGATGGAATA	TTAAATTGTA	60
ACATGATAAA	CATGCAAGAC	TGTTATCAA	TCTAGATAAT	TTATATACAT	TTTGATGACT	120
TAGGAAAACA	AAGCAATCAT	TTGTGACAAG	CCTAAAAAGC	TTGACATATT	TAACATACTT	180
AGGAACCTTT	TTTGTGCGGT	GGGAATTCTC	TAATGTTATC	ATGTGGGCT	TTTGAAAGTA	240
ACAAACAGAA	GGCCAGTCTG	TTGCAAGTTT	GCTGCTGAAC	ATCACATTCC	ACCCTAAGAA	300
AACACAAGGT	GGATTGCATC	GAGGGTGGAT	ACCTTACCTT	AGCACAGA		348

(2) INFORMATION FOR SEQ ID NO:1424:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGCGG CCGCGTCGAC TTGGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTTCTC	60
TTTACACTGG CTGTGTTACT TATTCTTCA CCAAAGCCAG GGAACGCTCC TTTAGCTACT	120
GCAGCATTTCA TAACAGATGC GACAAATCAC AG	152

(2) INFORMATION FOR SEQ ID NO:1425:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCCTC GAGATGCGCC	60
ACTTCTGCT CACCCACCTT AGAGCCTTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC	120
ATCCCCAGCA CGACCCCCAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA	180
AAACACCCTC TCCATCCCGG CACCCA	206

(2) INFORMATION FOR SEQ ID NO:1426:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCCTC ATCACTGGTT GGCACGTGAGA	60
GCTTCTTAAG ACGCTCCATG AGCTCTTTCT CTTCTCCATC ATCATCCACA TCCTTCTTCC	120
GCCGCCCTT TCGGGTATCT CGCTTTTTTT TTGCTGCTG TTGCTGTTGC TGCTGCTGCT	180
GCTCTCTC CTTGAGCACT TTCTCTTCTT CCCCAGCCTG TTTATCTTCT ACTGCCAGCT	240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CCTTCTTCCC TTTCTTCACC ACTTTGTCTG	300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1427:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG CCGCGTCGAC AGATATTGG TTATCTTGAC TTTTAAAT AACATATTC	60
TACAGGATT TGAGTCTGAG AAGAGAAAGG TAATATGCA GACACTTCGA TTGTTGCAC	120
ATTATTATGG AGCATCATTA ATGGTTGTA CATTCTGT CCTTGGCT TGAATGGACA	180
GTACCAAATT TGCGAAATC ACAACTGTA TGCACAGCTA CGAGGAATAA ATGCTTTGC	240
TAATGCACAT GGTCGGTTG CTTCCTTACA GCTGAAGACC TCTCCTTACA GAGTGTGAG	300
TAATGCATCT GTTGAACATG CACTGCTAGA TGGCCTCTC GAG	343

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG CCGCGTCGAC GAGGGGAAGA TGTACGCAA GATAGAAGGC TTTTTGTTAT	60
TACTTCTCTT TGGCTATGAA GCCACATTGG GATTATCGTC TACCGAGGAT GAAGGCGAGG	120
ACCCCTGGTA CCAAAAAGCA TGCAAGTGG ATTGCCAAGG AGGACCAAT GCTCTGTGGT	180
CTGCAGGTGC CACCTCCCTTG GACTGTATAC CAGAACTGCC ATATCACAAAG CCTCTGGGTT	240
TCGAGTCAGG GGAGGTACA CCGGACAGA TCACCTGTC TAACCCGGAG CAGTATGTGG	300
GCTGGTATTC TTCGTGGACT GCAAAACAGG CCCGGCTCAA CAGTCAGGAC TTTGGGTGTG	360
CCTGGCTCTC CAAGTTCCAG GACAGTAGCC AGTGTGTTACA GATAGATCTG AAGGAGATCA	420
AAGTGATTTC AGGGATCCTC ACCCAGGGC GCTGTGACAT CGATGAGTGG ATGACCAAGT	480
ACAGCGTCCA GTACAGGACC GATGAGGCC TGAACGGAT TTACTACAAG GACACTCTCG	540
AG	542

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG CCGCGTCGAC TTAAGAGTCT GCTTCGGAGA CCGTAAGGAT ATTGATGACC	60
ATGAGATCCC TGCTCAGAAC CCCCTTCCTG TGTGGCTGC TCTGGCCCTT TTGTCGCCCA	120
GGGCCAGGG CTGAGGAGCC TGCAAGCCAGC TTCTCCAAAC CCGGCAGCAT GGGCCTGGAT	180
AAGAACACAG TGCAAGGACCA AGAGCATATC ATGGAGCATC TAGAAGGTGT CATCAACAA	240
CCAGAGGCGG AGATGTGCC ACAAGAATTG CAGCTCCATT ACTTCAAAAT GCATGATTAT	300
GATGGCAATA ATTTGCTTGA TGGCTTAGAA CTCTCCACAG CCATCACTCA TGTCCATAAG	360
GAGGAAGGGC GTGAACAGGC ACCACTAATG AGTGAAGATG AACTGATTAA CATAATAGAT	420
GGTGTGTTGA GAGATGATGA CAAGAACAT GATGGCATAAC TCGAG	465

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCCGCGG	CCGCCTGCAC	GCTGTCATG	AGGAGACTTA	ACCACAATTC	AAAGTGTAGC	60
AGTTGTGTAT	TTAGCATTA	TAATATTTGA	TTGAGGCCCT	GAGGTGTTAA	TATCTCAATC	120
TCAGAGTTAG	ATGTTCATGT	CCCTTTGAA	TTTTTTAAC	ATTTTCATA	ATTTTTTTT	180
TAAGTTAGGG	AGCACATTGA	GTGAAGTTCT	CTGTGTTAGAA	CAATACCTTC	TGCTCTGCTT	240
CTCCCAGCTT	TCACTGAGGG	CTGAAAAGG	ACAGGCCCTGT	CCAGCTGTAC	TGTCCCCACTG	300
TGATGGGGA	AGCTCAGGCT	CTGGTGGAAAG	CAGGGGGCAT	GGATGTCAAA	CAACTGATGT	360
GCAAAACACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCCGCC	TTCATGGCCT	ACTACTGATG	AGAACATTAT	CTGCATATGC	AAAAAAATTT	60
TAAGCAAATG	AAAGCTACCA	ATTTAAAGTT	ACGGAATCTA	CCATTTAAA	GTTAATTGCT	120
TGTCAAGCTA	TAACCACAAA	AATAATGAAT	TGATGAGAAA	TACAATGAAG	AGGCAATGTC	180
CATCTCAAAA	TACTGCTTT	ACAAAAGCAG	AATAAAACCG	AAAAGAAATC	AAAATTTAC	240
ACTACATTAA	TCTCGGAATA	AAAGAAGCCG	AAATAAATGA	GAGATGAGTT	GGGATCAAGT	300
GGATTGAGGA	GGCTGTGCTG	TGTGCCAATG	TTTCGTTTC	CTCAGACAGG	TATCTCTTCG	360
TTATCAGAAG	AGTTGCTTCA	TTTCATCTGG	GAGCAGAAAA	CAGCAGGCAG	CTGTTAACAG	420
ATAAGTTAA	CTTGCATCTG	CAGTATTGCA	TGTTAGGGAT	AAGTGCTTAT	TTTTAAGAGC	480
TGTGGAGTTC	TTAAATATCA	ACCATGGCAC	TTTCTCCCTGA	CCCCCTCCCT	AGGGGATTTC	540
AGGATTGAGA	AATTTCCTCA	TCGAGCCTT	TTAAAATTGT	AGGACTTGTT	CCTGTGGGCT	600
TCAGTGATGG	GATAGTACAC	TTTCACTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCCGCC	TTCATGGCCT	ACTAATTTC	AAGAGCTAAA	CTTTATACCG	CCTGCAATAT	60
TTCCATTAC	TACCAAGTTT	TTTCTGACCT	AGTCAGATAT	AAGAAGCCCC	CTTACTGGAT	120
ACAAGACAGT	TAATTATCAG	ATCCAGTCTG	ATCCTAGATC	CAGTCGTGTC	CTAGACCCAG	180
TCCAGTTCT	GTTGTGACTT	CCAAACCCAG	TTTGGATCAG	AAATTTGCTC	AAAGAAACTA	240
GGAGAGCTCA	AAACACAAAT	ATGTGGAGCT	TCTGAATCTG	AGAGAGAACG	AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

GGGTGGTTTC ACCTTGTGG CCAGGCTAGT CTTGAACCTCC TGACCCACCC	60
ACCTCGGCCT TCCAAAGTGC TGGGATTACA GGCATGGGCC ACCGCATCTG ACTGGTGCAC	120
TTTACTTTGA CCTGTATAA ATCCCTGGT TTGTTATTAC TAGTTTTAC TTTAGACAGC	180
AATTATCTTT CAAGGAAAAA TTAAAGGAA AAAATGTCT TATATTACC CTCATGTTA	240
CCATTCCCAG TGCTCTTAT TTCTTATGT CAATCCGGAT TTCAATTGT TATCATACTG	300
TTCTGCCTG AATAACAGTT TAACAGCAAC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:1434:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAATTCTGGCC TTCATGGCCT AATGCTCTGT GTCACTGTCT CCCGGTGCTC AGCACAGACA	60
AGTCAAGAC AGATTTTTAT GATCAATGCA ACGACGTGGG GCTCATGGCC TACCTCGGCA	120
CCATCACCAA AACGTGCAAC ACCATGAACC AGTTTGTGAA CAAGTTCAAT GTCCCTCTACG	180
ACCGACAAGG CATCGGCAGG AGAATGCGCG GGCTCTTTT CTGATGAGGG TACTTGAAGG	240
GCTGATGGAC AGGGGTGAGG CAACTATCCC AAAGGGGAGG GCACTACACT TCCTTGAGAG	300
AAACCACTGT CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:1435:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

GAATTCTAGA CCTCCCACCC TGTAGAACAT TCTCCCACT TAGGAGATAG TCATATTTTC	60
AGGCTGCCTT TGAAACTGTG GGTACACAAA CAGCAGAGCG ATCTATTCA GCAGTTGAAG	120
TTGTATTTGA GCCATTATTT CTTCCACTCT CTTTTGGTT GAGTTTCTAG GAAGGAAAGG	180
GCTGAACTCC ATGACTGCTC ATATTACAGT GCTAAGCTCT CACAGCCATC CACTTTTAT	240
ACACAAGAAG AAACTAGGCC CACCAAGAGT AAGCGCTGC CTGAGGTGG TGAGTGAGTA	300
AGGGCCAAG GTGAGGTTGG GATCTGGCCC TTTCTCTTT CTGGCCACCA CAGGGCACTA	360
CCTCCCCATAC CCACACACTC GAG	383

(2) INFORMATION FOR SEQ ID NO:1436:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 303 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GGAGAACTGC TAAGGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA	60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCA GTCCGGGTA	120
GATGACCATT TGATGGAAA ACAACACATG GGCTATGCCA AAATTAAGC TACTGTAGAA	180
GAATTAAAAG AAAAGTTAAG GAAAAGAAC GAAGAACCTG ATCGTGATGA GCGTCTAAA	240
AAGGAGAACG AGAGAAAGAGA AGAAAAGAGAA AAAGAACGGG AGAGAGAAAAG GAAAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 228 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTGGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT	60
TGTAACACGT TAAGTGTAAA TAAACAAATA ATGCTTGCT TTTTGTGTTTC TGGAATTATT	120
GTTGATTTTC TTGCAAAAT GCATATATCT TCAGGTCTTT TTTTTATAAC CATATGCATA	180
CCAAGGCCACC ATTCCATTGA CTTTCAACT TCTGTCCCAA CCCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTCATGATG	60
ATTTTATTGG CAAAGGAAGT TCAACTGGTA GACCAAAACAG ATTCAACCTTT ACTTAGTCTC	120
CTTGGACAGA CAAGCTCACT TTCATGGCAT CTTGTGGATA TTGTGTGTA CCAGAGTGTG	180
CTAAGTTATT TCAGCAGCCA TTACCCCGCG TCCATCATCC TGCCAAAAGA ATCTTATGCT	240
GAATTAAATCA TGAAGCTCCT AAAAGTGTCT CGGGGCCTTT CTATTCCTAC TGACAGCCAG	300
AAGCATCTTG ATGCAGTTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCTC	360
AGCACCCCTGG AACAAAATGG AAAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG	420
CTCTTAGACG ATATCATTGT CTTTAACCCG CCCGACATGG ACAGCCAGAC CCGCCACATG	480
GCCCTCAGCG GTCTCGAG	498

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

GAATTCCGCC TTCATGGCCT AGCAGGGAGA GGGGTTCTGT GCTCCTGAGA TTAGTTCAGA	60
TGGTCTAACCA ATTGTTCTAT ATGTGCATT TAGTTAAATAT TGTGTATTAA AGGATAAGTC	120
TTAATGCTCA AAGTATGTTA AAAATAGATG TAGTAAATCA GTCCCTTGT GAATGTCCTT	180
TTGTTAGTTT TTAGGAAGGC CTGTCCTCTG GGAGTGACCT TTATTAGTCC ACCCCTTGGA	240
GCTAGACATC CTGTACTTAG TCACGGGAT GGTGGAAGAG GGAGAAAGAG AAGGGTGAAG	300
GGAAGTGGCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

CCAGCCGTCT GCAGCTCCGG CCGCCACTTG CGCCTCTCCA GCCTCCGCAG GCCCAACCAGC	60
CGCCAGCACC ATGGCCAGCA CCATTTCCGC CTACAAGGAG AAGATGAAGG AGCTGTCGGT	120
GCTGTCGCTC ATCTGCTCCT GCTTCTACAC ACAGCCGCAC CCCAATACCG TCTACCAGTA	180
CGGGGACATG GAGGTGAAGC AGCTGGACAA CGGGGCTCA GGCCAGAGCT TCGAGGTCAT	240
CCTCAAGTCC CCTTCTGACC TGTCCCCAGA GAGCCCTATG CTCTCCCTCC CACCCAAGAA	300
GAAGGACACC TCCCTGGAGG AGCTGCAAAA CGGGCTGGAG GCAGCCGAGG AGCGGAGGAA	360
GACCGAGGAG GCGCAGGTGC TGAAGCAGCT GCGGGAGCGG CGCGAGCACG AGCGCGGGCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

GAATTCCGCC TTCATGGCCT ATAGGCCATG AAGGCCGCC TTCATGGCCT AGTCAGGCTT	60
AAGTTTAAATA AATAGCAAAT TGCAACAGA TATTACAAAT GATGAAAGA CAAACAGAGG	120
TCCTATCCGT GCAGTCCCAA CAATAAAGAC AGGCATTGGC ATAAAGTGT TATAAATTCT	180
TGGGTACAGC TGTTCTGAAA GTAAAGTCA CTTTCAATCC TAAAAAAAGT CCGCTATTCC	240
TCCCTGGCTG CTCTGGACTG TCCTCATCCT CTTTAGCTGC TGTTGCGCCT TCCGCCACCG	300
ACGAGCTAAA CTCAGGCTGC AACAAACAGCA GCGGCAGCAT CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 591 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCTGGCC	TTCATGGCCT	AGGCTTCCCT	GTTCCCTAG	CCCCAGTCGA	GAGGAAAGAG	60
AATCGGGCCA	CTGCCAGAAA	GAGAGTCAAG	CAAACCTGGA	AGGGCAAATC	TGAGAGTGGG	120
AAGGCCAAG	GCCGAGGCC	AGATTTAGTA	TTCACTAGCA	GCGCCTCGG	GTAGCAGGAT	180
GATTCCCTTT	CTCTCCCTGTC	TGCTGCTGGC	TCTCTCCCT	AAGCTACAGG	TTGGCAGGAC	240
CACCTCCGCC	TACTTCTCCA	CCATCCCTAG	CATGCCAGCG	CGTTCCAGA	TCAACCTGCC	300
AGTGGAGTCA	GGCAGTGCAC	TCTCTGGAGCC	AAGAGGGAG	GGCAGGGTAG	AGAGGGTATG	360
TCCAGTAGCC	TGGAGCTCCA	TGGTGGCTTC	ATGCCTCCCT	TCTCCCAGCT	CAGGTGGGCC	420
TGAGGGCTCC	CTCGGAACAG	TGCTCTAAAT	CCTGACCCAA	GGGCCAGCAT	GGGAAAGAGA	480
ACAATTGT	TTGTGAATAT	TCACATTGTT	TATAATGTC	TGACCTGTCC	G	540
						591

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCTGGCC	TTCATGGCCT	AGATTGAATT	ACCTGCCTCG	AGCTCCGTGTC	CTTAGGTGAT	60
CTGCCCCCCT	TGGCCTCCCA	AAAGTGCTGGG	ATTATAGGAG	TGAGCCACCT	GGCCAGCTA	120
GCTTTTAAAG	TTCTGCCAGC	ATAGCCCCGG	GATGGGGTGG	GGGTAGACAG	GGCCTTAGGA	180
CTTTCATTTT	TAAAATGCTC	ACTCCACAGT	GAAGAACAG	GTGATGACTA	TCCTGAATAT	240
TTGGGAAGCT	GTGCTCTAGA	ATTTTG GCC	TCAGTTCCAG	AACCCACAGC	TTCTTTACAA	300
CATGCTTCAA	GCCTGGGACT	GAGCTGCCAG	TAAAATAACC	CCTAGTAACC	TTAATATGGG	360
TTAATAAGAT	CTGGTGGCCG	CTCTGCACCG	TCCCCGCC	CTCCTCGTCC	GGGCACCTGT	420
TATGCTAGGC	CAGCATGTTT	CGAGCTTAGC	CAGGGAAAAT	CGTGGACCAA	GACAGGGCTT	480
TTCATCCACG	ACTGGCTAAA	AAAGATGGCTC	TCAATAATAT	CTCGAG		526

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GATTGAATTC	TAGACCTACC	TCTCTTTTTT	TGTGGTCTCT	CCTTCATTCT	CTGTCATT	60
CTCCGTGAGA	TTTTCTGATT	AGTAGTTACC	TTCAGCATGC	CAGTTGACTT	GCACACCTAC	120
AATCCAACCT	TTCTCTACT	TTGTCATCTG	ACAACAGCT	GGTTTGAGC	TGATTCAGG	180
ACTTCTTCAC	TTGGGTGGCC	ACTCTCATTA	CCACAGAGTT	CACTAGTCAT	GGTGAACACA	240
CCAGTCCTTT	ACACCTCCCT	CACTCCAAA	CCACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 644 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

GAATTCCGGTC	TTCATGGCCT	AGGGAAAGAA	AGGCACCTTT	CTCACAGGGT	GGTGAGAGAG	60
AGGAAGGGGG	ACGGGAAAG	CCCTTATAA	AAGCATCAGA	TCGGCTGGC	ACAGTGGCTC	120
ACCGGTGAA	TCCCAGCACT	TTGGGAGGCC	GAGGCAGGGT	GATCGGGGG	TCGGGGGTTT	180
GAGGCCGGCC	TGGCCAATAT	GGTGAGACCC	CCTCTCTGCT	GAAGATACAA	AAATTGGCTG	240
GGCATGGTGG	CGGGCACCTG	TGGTCCGGC	TGCTTGGGAG	GCTGAGGCCG	GAGAATCGCT	300
TGAGCCCGGG	AGGCAGGGT	TGCACTGAGC	TGAGATCGCG	CTACTGACT	CCAGCCTGGG	360
CAACAGAGCG	AGACTCCATC	TCAAAAATAA	AAGAAAGGCA	TAAATATTAC	ATTACCCCTCT	420
GAATACTGTG	GTGTTGATACT	TGAGTTTTTA	TGTGTGATA	TATATGTGTA	TAGGAGAGTA	480
AAAATAAAAT	GAAATTAGGA	TTTGCAAGT	TATAATCATA	AAAATTGAT	TACCTAAAT	540
ATATCATTAG	GATATTATGT	TATTTACATC	TCTTATGCTA	ATTCTAATTT	TCTTTATTG	600
TAGTATAGTA	GAATTGAGAT	TTGNNAATGG	AATTGGTCC	CGAG		644

(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 756 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

GAATTCCGCC	TTCATGGCCT	ACCTCACCCG	GCCCCGACAC	GGACAGGATT	GACAGATTGA	60
TAGCTCTTTC	TGGATTCGGT	GGGGCTGGT	GCATGGCGT	TCTTACTTGG	TGGAGCGATT	120
TGTCCTGGTTA	ATTCGGATAA	CGAACGAGAC	TCTGGCATGC	TAACTAGTTA	CGCGACCCCC	180
GAGCCGTCGG	CTTCCCCCAA	CTTCTTAGAG	GGACAAGTGG	CGTTCAGCCA	CCCGAGATTG	240
AGCAATAACA	GGTCTGTGAT	GCCCTTAGAT	GTCCGGGGCT	GCACGGCGC	TACACTGACT	300
GGCTCAGCGT	GTGCCTACCC	TACGCGGCA	GGCGCGGTA	ACCCGTGAA	CCCCATTCGT	360
GATGGGGATC	GGGGACTGCA	ATTATTCCCC	ATGAACGAGG	AATTCCCGAT	AAGTGCAGGT	420
CATAAGCTTG	CGTTGATTA	GTCCCCTGCC	TTTGTACACA	CCAACCCGTC	ACTGACTTT	480
ACCGCAGCTG	GAACTGTGCT	CCAGGGCCTT	TCCATCTTT	CCCCCACACT	CCCTTGACC	540
CTGTGTTGCC	CTCAGAGGCC	AAATTCTTGG	GTCAGGGAC	TGGCTTTCGG	CCTATTGGTG	600
GTGGAGCTGG	GGTCTGGCA	AGGAATTCA	GGCAGCGCTT	GGAGGCAATG	TTCCCCGAGA	660
GCAGTTCACG	GTGGTGATGT	TGACTTATGA	GCAGGAGGAA	GTGCTTATGA	ACTCTTTAGA	720
GAGGCTGAAT	GCCTCCCTT	ACCTGGAAC	CTCGAG			756

(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 359 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

GAATTCTGGCC	TTCATGGCCT	ACCTGCCTCG	AGGTCACTGG	GATCATCTGA	ACAGAAGTGC	60
ACAGGCTACT	TGTACAGAGA	AAAAATTAAT	ACTCAAAGGA	AATCTTCATT	TTTAGATTG	120
ACTTGGGAA	TTTGAATTT	CATCAGTGCA	AATATAAATT	TCTCTATCCT	GCTCTGAGGC	180
TAATTGGTAC	CATATTTCC	CTTGTGTCT	TGTGACTCTG	CCACATCCC	TCTCATCCTG	240
GCCTCTGAGT	CAAGAACCCA	GTGAACTGAC	TTTCTAGTTTC	TAGAAGTTCC	GCTGCAAGGC	300
CAGGAAAGCT	TGAGAAGAGT	ATTGTGGAAG	AAGCAAAGGT	AGACCCCCAT	TCACTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1448:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 146 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

GAATTCTGGCC	TTCATGGCCT	AGGGAAAATA	AGTTAATTCT	AAATCAAATC	AAAATATTAT	60
ACCTCATGCT	ATGGTTTAT	TTTATTTCAG	TGCTGCCGT	ACTTTCCCTC	CCCAAAGCAA	120
TGTGTTTCC	AGCCACAACC	CTCGAG				146

(2) INFORMATION FOR SEQ ID NO:1449:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

GAATTCTGGCC	TTCATGGCCT	ACTTTCAAA	AGCAGCTTG	CTCTACTGAT	TTGGGTAAAA	60
GCTTAGTTGC	AGTTGGNTTG	GGAGGAAATG	GGAGCAGAAA	ATTTGAGAGA	GTGAGTGTAG	120
ACAACCTCTT	CAAGGAATT	CGCTATAAT	GGGAGTAGAG	ATCTGAAGAC	TGAATAATTA	180
GCAAACGTAA	AAGTGGGAAG	ACGTAATTCT	CTTATTATTT	CATTTTCTT	AGTGAATAAA	240
GAGGTGAAGT	TCTCTGAGTA	ATAGGAGGGT	CAAACAGGNG	TTAGAAGTTC	ACAAAGAAAG	300
GTCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1450:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 545 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

GAATTCTGGCC	AAAGAGGCC	AGCATGTTGT	GGCTGTTCCA	ATCGCTCCTG	TTTGTCTTCT	60
GCTTTGGCCC	AGGGAATGTA	GTTCACAAA	GCAGCTAAC	CCCATTTGATG	GTGACGGGA	120
TTCTGGGGGA	GTCAGTAAC	CTTCCCTGG	AGTTTCCCTG	AGGAGAGAAG	CTCAACTTCA	180
TCACCTGGCT	TTCAATGAA	ACATCTCTG	CCTCATAGT	ACCCCATGAA	ACCAAAAGTC	240
CAGAAATCCA	CGTGAATAAT	CCGAAACAGG	GAAAGCGACT	GAACCTCAC	CAGTCCTACT	300

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA	360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA	420
TACAAGTTAC CAATCACAGT CAGCTATTTC AGAATATGAC CTGTGAGCTC CATCTGACTT	480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTCAAGATG GGAGGCCCTG GGAAACACAC	540
TCGAG	545

(2) INFORMATION FOR SEQ ID NO:1451:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GAATTCCGGCC AAAGAGGGCT ACAGTAAGCA GATGAACTTG CTTGCTGTT TCAGAAGTGAG	60
GAATCGAGGG AACGAAAACG GGGGTGGGTT TTTGCGCTTC AAAAGGGGA AGCGATGTAG	120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAATGGCT TCTTACATCC TTTCTGGGC	180
CCACCAAGAG CTCTCTGATCT CATCACCTTT CCATTACCGA GGCTTCCCCA GCAACCCAG	240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCAACCAAT CCTCTGTAAA	300
TAATATTTCAGA TACATGAAGG GAACCCCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1452:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GAATTCCGGCC AAAGAGGGAA GGGAAAATT CAAGTCAGAT AGAATTCTAT ATATACCATT	60
TCTTGGAAC CTTCAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTCA ACACAGTTGT	120
CCTTAGTCCT CATGTCAGTG CTTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA	180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC	240
TGAAAACCTT TGCAGCACTC GAG	263

(2) INFORMATION FOR SEQ ID NO:1453:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 558 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GAATTCCGGCC AAAGAGGGCTT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTACACCA	60
TTTGTGTTATT TTATGGTCT TTTTCATCC TGATTTGGTGC TCATTTGGTC CGCTCTTATG	120
GCATACCTGG TAATATTTCAGA TTGAATCCTT AGTACTGTAC ATGAAAATT GTAGAGGCC	180
CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTCCCTT CACTAGACAG TTATGTTGGG	240

GGTTATATAC CTTACTCCAA TCAAAGATTG AGCTGAGTCA GAACTCTAAG GGAGTTAAGT	300
TTTTGTCTCC TCTGGGGACC AGGGGTRCCA ACTAAGACTG TGATATTCAAC CAGGATCCAA	360
TTTCCCGATG CCTTGTGAAC TCTTATTCTT ATCTTTTAA CACATCAAGG CAGCTGGTT	420
GCATTTTCTT TTCTGTTCAG CTTTTTAGCT TCATCCTTG CAGCTTAAAG AATTGACAGT	480
TGTCTTACAG GGAAAAGTAG CTGTGTAAACA AGCTCATGTC TCTGCCTCTC TTCCACTGAT	540
ATCTTAGCCC CGCAGGAG	558

(2) INFORMATION FOR SEQ ID NO:1454:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAATTGGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGAAATA CAATGATTTT	60
AAAAAAAGATT TCCAAAGGCT TTTTCTTTTT TTCTTTTTTC TNGAGACAGG GTCTCACTCT	120
GTCGCCAGG CTGGAGTGCA GTGACACAAT CTCGGCTCAC GGCAAGCTCC GCAGTGCCCC	180
CTCAGGTTCA CGCCATTCTT CCGCCTCAGC CTCCCGAGCA GCCGGGACCA CAGGCACGCG	240
CCACCCAGCC CAGCCAACCTT TTACATTTTT AGTAGAGACG GGGCTTCACC ATGTTGGCCA	300
GGATGGTCTC GTCTCTTCT GCCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1455:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

GAATTGGGCC AAAGAGGCCT ACTTGATGTC TGTGACCCAC ACNTATTGCG ACACCTCCCTC	60
CCCTTTGAA ATCCCTAAAT AAAAACTTGC TGGTTTTGC GGCTAGTGGG GCATCATGGA	120
ACCTACTGAC ATGTGATGTC TCCCCCGGAT GCCCCGGCTT AAAATTCTC TCTTTGTAC	180
TCTGTCCCTT AATTCTCAA GCTGGCCGAT GCTTAGGGAA AATAGAAAAG AACCTAGGTG	240
AATAATGGGG CAGGCTCCCT GATGAAATGA TATATATTCT TAAAATAAAC TTTTCATCTT	300
TGCATATACG TTTATATGCC GAGTTTTCTC CAACCTTGTCA TTACAGCACT TTGTATACTA	360
CATTCTAGCC ATACTAAACT CTTGCAGTTC CTGAGACATG TGCTGTATCC TATTCTTCT	420
GGTCCTTTC TCATTGATTA ACTACCTGGA GCATACTTT AATTCAAGTGT CAGCGCTCGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:1456:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 393 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

GAATTCCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTT	60
TTGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTTGCTTCC AGCCACAAAG	120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCCTATGT TTGGTCTACT ATTGCATTAA	180
GAAGCTGCAA CAAATCCAA TGAGACTAGC ACCTCTGCCA ACACGTGATC CAGTGTGATC	240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC	300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCATGGGG TCAGCATAGT CACCAACTCT	360
GAGTTCCATA CAACCTCCAG TGGGATCAGC ACG	393

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

GAATTCCGGCC AAAGAGGCCT AGTGTGTGTC TGTGTGTGTC TGTGTGTGTT TTATCTCCTT	60
CAACTCTGAC CACCTTGGAAAG TCAGCCTAAAT CTCTGCCCTC GTGTTGATCT TTAATTCAAC	120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTTGATGTT TTTTTGGCT TTTTTGAAC	180
TCATAAAAGG TATCCAAGTT CCTGGAGGGC ATAGTGCCCA TCTCCTCCCA TCCACCAGTG	240
GACATTCTTT TCCAAAAGAC ACATGG	266

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

GAATTCCGGCC AAAGAGGCCT AGGGTTGAGT TACTTCAGA GTAGATACAG GGTTTTAGAT	60
CATTACAGTT TAAGTTTCT GACCAATTAA AAAAACATAG AGAACAAAG CATAATTGAC	120
CAAGCAACAA GCTTATAATT AATTTTTATT AGTTGATGTA TTAATGATGT ATTGCTTTT	180
GCCCCATATAT ACCCTGTGTA TCTTACTTG GAAGTGTGTTA AGGTTGCCAT TGGTTGAAAA	240
CATAAGTGTCA TCTGGCCATC AAAGTGTATCT TGTTTACAGC AGTGTCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

GAATTCCGGCC AAAGAGGCCT AGTTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT	60
TCTTTATTAA TGTAATGAA AATTCCAAT TAAATTATTAC CACACAGCAT TTTTCCCCT	120
TAATTCATT AGTTTTTTA TTTCTTGGCC GACCCAGGCC AGGAGCTTAG GGAAAATGAT	180

GAAGGCCTCTT TTACGCTGTA GTCCTGCAA TGCTGTGTT TATTCCCCCT CCCCTGCTCA	240
GCACTCACCC ACAGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG	289

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGGAACATCT GATCCAGTGA TAGCACGTCA	60
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTTCCACT AGCAAACATA TCGTATTTCAC	120
TTTTACTCTC CCATTTTAA TTAATCTTC CTATTCATT TCACCCCTCTC ATCTCTTCC	180
TCTATTGGAT TATCTCAGGT ATCTAATCCA ATTCAACTACT GTTTAATGAA TGTAATTGCA	240
ACCAGTCTGC AATTCTTAAG GTTTGTTTC TTTGCTTTT TCTTTGTAG TCCATCTCTT	300
TGCTACACTC AAGCAGGTCT AGAATTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC	60
TAGCATTACT GACTTTAAAT TTTTGAGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG	120
AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAACCGGA ACAACTGGTT TGGTGGAGAG	180
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTTATGCTT	240
GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAACCTT	300
ATCATCAGCC AGATGCCAAG GAAGAGATTG TGGGAGAAC CCGAGGACCC CATGTTATTA	360
TTTTACCTAT TCCCCAACTC GAG	383

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG	60
TGGTGAGGGC TTCTGGACTG GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA	120
AGAGAAAGATT CTCACCATCG CTGATTCAAA CAAAAGCATT TCTCCAAGTG GTTGCAGATG	180
ACATGATTTC CCAAAGTGT AGAGCTGAAG TGTGTTTCTT TGTGTATATA TACTGTGGTT	240
CCTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTCCCCA CGATATGATT	300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTAT 360
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 174 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTAT 60
TTTGAGTGTG TTAGTGAGTA TTGCACTGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120
AAAAGAGTGC TTGCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 122 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTTCCA AATGTATGGC ATTTGCTTGT 60
TTTTAACGTT GATTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTCATGTG TATATATTG TGCTCTTT 60
CTAAAAAAA TTGAGATGGA AATTACATA ACAGAATTAA CAAAGCATA CATTCAATTG 120
GTATTTACTA CATTACAAT GTTGTGCAAT CATTACCTT CTCCAGITCT AAACATTTCA 180
TCACCCCCAA AGGAACCCCT AAGCGGTAC TCCCCACTCC ACTGTCTCCC ACAGCCCCCTG 240
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTTACCTA CTCTTGATAG CTCTACAAAT 300
GGAACAATAAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCTGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAGTT ATTCTACAAT	60
GTGGGTTTTC ACTGCTCTGT TCACATGCCT TATTCTAGACT TCTTGTGGTG GTCAATTGCT	120
AGATGGTCTG TTGGAATTAT CTGCTGTAT ACATCCAAA AGGTCTCAC A GAGAG	175

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCTGGCC AAAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC	60
AGAAATTTTC AGTGAAAGTC TTGATGCTGCC GCCGTCCCCC ACTCCCTACA TCAGAACGCA	120
TCCCCTCATCT GGACTCCAGC GGTGGCTTCT TGATGCTGCC CGGTCCCCCA CTCCCTACAT	180
CAGAATGCAT CCCGATCCA GACTCCAGCG GTGGTGCCT ACCTGCACGC TGTTGCCAAG	240
TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAAACAGCC TCCTCACTGA TCTCCCTTT	300
CTTCCCTTTG CCTCCTCCAG CTCATTTTC ACAGTGTAGA ATGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCTGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT	60
TGTAGAGACT GAATCTTTGC TGCTTGTAT AAATATTGCA GGGCATAAAC CTTCATTCA	120
TAGGTTCATC AGCTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTCAGC TCCTTAGTCC	180
TAGGTGTGGT CTAGAATTAA CCCTGTATTG AAGTCACTTT GGAATAGAAAG TTTTTTTCT	240
CGGACAGGAT ACACATATAA TTTTTAAATC TCCTCCCATA GTCGTAGTGC AGAGATATAA	300
ATAGAAGTAC AGGTAAGAGA TGTCCTCTGC CTTTCAAAAC CTTCTTAAGT TTGTGTGCTG	360
CTTAACTTT ATTACACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 612 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCCGCC	AAAGAGCGAT	GGGGACAAAG	GCGCAAGTCG	AGAGGAAACT	GTTGTGCCTC	60
TTCATATTGG	CGATCCTGTT	GTGCTCCCTG	GCATTGGCA	GTGTTACAGT	GCÄCTCTTCT	120
GAACCTGAAG	TCAGAATTCC	TGAGAATAAT	CCTGTGAAGT	TGTCCGTGTC	CTACTCGGGC	180
TTTCTTCTC	CCCGTGTGGA	GTGGAAGTT	GACCAAGGAG	ACACCACCA	ACTCGTTGC	240
TATAATAACA	AGATCACAGC	TTCCTATGAG	GACCGGGTGA	CCTTCTTGCC	AACTGGTATC	300
ACCTTCAAGT	CCCGTACACG	GGAAAGACACT	GGGACATACA	CTTGTATGGT	CTCTGAGGAA	360
GGCGCAACA	GCTATGGGGA	GGTCAAGGTC	AAGCTCATCG	TGCTTGTGCC	TCCATCCAAG	420
CCTACAGTTA	ACATCCCCCTC	CTCTGCCACC	ATTGGGAAACC	GGCAGGTGCT	GACATGCTCA	480
GAACAAGATG	GTTCCTTCA	TTCTGAATAC	ACCTGGTCA	AAGATGGGAT	AGTGATGCC	540
ACGAATCCA	AAAGCACCCG	TGCCTTCAGC	AACTCTTCCT	ATGTCTGAA	TCCCACAAACA	600
GGCGCACTCG	AG					612

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAAAAGCCAA	GACTTTAACT	TTCATTACAT	ATCTAATAGT	TGATATCACC	AGTTACCATT	60
TTGAATTTG	TATAGTACTA	GGTTAGAAC	TTGCTTAATC	CTTTAAAAAA	AAATGCATT	120
ACGTAGAACT	CGAGCAGGAT	GTGGCCCCC	GATGTTTTTT	CTTCATACTC	TTCCTGCGCC	180
TCCCTCCATT	TCTGCACAGT	TCTCACCCAC	TACTCTCGAG			220

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCCGCC	AAAGAGGCC	AGGGCATCAT	GCAGACACAT	CTGTTAAAGC	AGGAAAAAAA	60
AAACCATGTG	GAAGATTAAG	CTAGGCAGAG	TGCCTGAAA	GCCCTCTGCA	ATAAGTTGAG	120
CTGAAAAAAC	CTCCATATCT	AAAGATGTT	TAATCATCTC	AAGAACACCA	ACAAACATTT	180
CTATTATAAT	ATAACTATGA	TAGATGTGAA	TCTACCTCTT	GGATTAAGGC	AATAATTTA	240
TAGCTATCAA	ATTTTCACAG	ACACCATT	CACTACTCTG	AGTTGCATCT	CTAACAAAGCT	300
TCTTTAGCCT	CTGCCTACAG	ATTCAGTGA	CAAAGCCATT	CAGCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCCGCC	AAAGAGGCCT	ACAACAAACC	ATTCTTCAGC	ACCTTGCAA	AAACATCTAT	60
GTTTGTGTTG	TACCTTTGG	GCTTTATTAT	TTGGAAGCCA	TGGAGACAAC	AGTGTACAAG	120
AGGACTTCGC	GGAAAGCATG	CTGCTTTTT	TGCAGATGCT	GAAGGTTACT	TTGCTGCTTG	180
CACAACAGAT	ACAACTATGA	ATAGTTCTTT	GAGTGAACCT	CTGTATGTGC	CTGTGAAATT	240
CCATGATCTT	CCAAGTGAAA	AACCTGAGAG	CACAAACATT	GATACTGAAA	AAACCCCCGC	300
GGTACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCCGCC	TTCATGGCCT	ACAACTTTAA	GATTAGCTAC	TTTGAATAAT	CTCAGTAGGT	60
TCTGGGGCAC	AGGAGCTGCC	CCTCTGGTC	TGAGATTGG	CCATGGGTG	ATTAGGACAG	120
GTATAGTGGC	ACAGAGTGTAA	AAAACCCCAT	AATGGTGTGG	ATTCTGGATT	GCTTAGTTG	180
CATTGACAA	GTGCAATGCC	GGGAGGAGGA	CTCCTCTTAG	AAAAGAGGAT	GGGAGGCAAG	240
AAGAGAGGCC	AGAGGCCAAC	ACAAGGTAAC	TTAGGCATAG	CATCAGGTTG	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCCGCC	TTCATGGCCT	AAAAAAAGTAT	GCAACACTCA	GTTTATTTAA	TACTTACAAG	60
GGGAAATCAT	TAGAAACACA	GAAAACCACA	GTTGCAGCTC	GACATGGATT	ACAGAGTCTT	120
GGAAAAGTCG	GTATTTACCG	GGCTATGCC	CCACCTGCTA	ACCTCCCAAG	TCTTAAAGCA	180
GAAAACAAAG	GCATGATCC	TAATGTAAAC	ATTGTACCTA	AAGATGGCAC	AGGGTGGCA	240
TCAAAACAAAG	AGTAACATGA	AGAAGAAAAAA	ACACCAGAAG	TGCCACCAGC	ACAGCCAAAA	300
CCTGGGGTTG	CAGCTCCCCC	AGAAGTAGCA	CCTGCTCCA	AATCATGGC	CAGTAACAAG	360
CAAGGTGGGC	AAGGAGATGG	AATCCAAGTG	AATAGTCAGT	TTCAGCAAGA	ATTTCCCAGC	420
CTGCAGGCA	CTGGGGATCA	GGAAAAAAA	AAAAGGAAA	CAAATGATGA	CAACTATGGA	480
CCTGGACCCA	GTTTACCTCC	ACCAACTCGAG				510

(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCTGGCC	TTCATGGCCT	AATCCATTCA	TTTGATGGAC	ATTTTCTAAG	TACCTGTGAG	60
CCAGGTGCTG	CCATTTCAA	GTCTCTTCTT	ACCAACGCTC	TCAGTGGCTA	GACATTTCTA	120
CGTGGCCAGA	AAAGTCCCGAC	TCTTGCTGGG	CGTCCCTGGA	CAAGTTGCCT	TCCTCCTCTG	180
AGCTTGCGC	TCCCCATCTG	TATACTGGAG	ACCCCTGCC	CCCCTCTGTA	CGGAAGGGCC	240
GATGCGAACG	TGCAGTTAAA	AAAGGCTCAC	ATGCTCTAG	CCTTGTGCAG	TCAGGAGGGG	300
AGACCAGGAC	AGTTGGAAAT	TATGATTGCA	AATGGCTTTG	CATTTAGAT	CATTCTGTG	360
TGTGATCAG	AGAAACGCAC	AAGTTCCCTG	GCATCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCTGGCC	TTCATGGCCT	ACACATTTT	GTCAGCAGAG	AGCCTTTAA	ACTTGGATTC	60
CAACTTCC	TTGTCTAAAC	GGAACCCCTC	GAACGTAGGA	CTTATAGGGG	AAGCTGCTGT	120
GCATGCTAA	AAAACACTA	ATCAGAATGA	GCTTGTCTAT	CCAGAGCCAG	AACTGCTGCA	180
GAAATTTTA	TAATTTCGCA	ACTTCTTTT	TTACAAGGAA	CTTTTGTGCT	ACTACACATC	240
AGGACTTTG	AAGCATCCAA	TAAATCCATT	TAATAAGTAT	GAGCATGTGT	CTGAGTGGAC	300
AAGAAAAGTGA	AACCATCCAT	GCTACATTGG	ATAATTTC	CTCCCCCAGA	CTGGACAGGG	360
AATCTCAGCT	TTCAAAACAG	AGTAACCTGG	CTTCACTTAC	AAAGCTGCAC	AGGCATTAAA	420
GATCTGCTG	CCTTGTAG	GCAGATTGG	AGGGGAGAGC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCTGGCC	AAAGAGGCCT	ACATGTAGCT	ATCCTAACAC	GTATTCTATT	TTGAGCCACT	60
TTCTCAGAGG	GAATTGGGTG	GGTGTGTCG	TAAGAACACC	TAGAAAATAG	GGGTGAAACC	120
TTTATGGGGC	CAGGGGAGCC	ATGGCAGAGG	GTGGAGTGGG	GGATAGAACG	CTTCAGACTC	180
CTCCGCCCA	GCCACTCTGC	ACCTGGGGC	TTTCAGCTGT	TAAAATGAAA	AGCCAATTAT	240
CTTCTGTAAA	TGAGGGAAA	AAAGAAGGAA	TAAGAGTGT	TATTATGTAT	GCTGATATGC	300
ATAACACTTC	AAATAAAAGG	ATATATAAGC	ACTTGACAAA	TTGAGGGAGA	AGGAGGGAG	360
AGTGCTGGGC	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCCGCC	AAAGAGGCCT	AGAGATTCA	GGTATCCCC	60
TTAGATGCC	ATGCAAAA	TGAGAAACT	GGTGACATGG	120
TGTTGTTT	CCATTGCTAC	TTTCACCAA	TATGCCATT	180
TGGTGACCTA	AAAGTAGAAA	TGAAAGAAC	AATCACAGAA	240
GACAAAAAAT	GTAGTTGAAA	AAAATGCATT	CTGTCCAGCA	280
		GTACACTGAA		
		AGCGCTCGAG		

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCCGCC	AAAGAGGCCT	AATTGCTTT	GCAGTAGT	60
TGATGGTTCT	CCTGTCAC	TGGTTGATAG	TGGAAAGTGA	120
CTGATGGACA	AGCTGGTAAT	GAAGAAATGG	ACTCGACTCG	180
GAGAGTATGA	GCTGGTACT	CCAGTCAGCA	GGAGACATG	240
CTCTTCTGC	GAGTCACAAA	CAAATCTAGA	CTCTCCCATA	300
TGTTCTTAA	CATCACGGCA	TTGGAAAG	AGGACGCTAT	360
AACTAGTAGC	TCCTGGGCT	ATTTCATCT	CTCTCCAAAC	420
TAACCGATCC	CATTAACAAAC	GGACTAAAG	CCTGGGAAATA	480
AGCCACTCGA	G			491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCCGCC	AAAGAGGCCT	AATTCAATTCA	GTGAGTGCT	60
AAGGCCTCT	GCTAGTTATA	TTCTAAATAAT	TACTACATGC	120
CAAGAAGCTC	ACAAAAGTAT	GCAGAGATAA	TTCCCGCCCT	180
TTTTTGAGG	AAGCAGACAC	TTAGATTTGC	CAAGAAGTGA	240
CTGTGCAATA	TATACATAAA	ACCTGTAGT	TATAAAATTA	300
TGAGAAGGGG	AAGGAAAGAA	GGAGCAAGTA	TTTGTGTTACA	360
TGACTTTGGA	AAACAGAAAG	ATAAGCCATG	GTGCTTGGAA	420
ATTAGTGGA	CAGGTATGAA	CTCATGGAA	TGGAGCAGAT	480
ATGGGCTATC	AAAGTGAATT	TTAGAGTCT	TGTACAGCTG	523
		AGTACATCAA	AGCAGATGGA	
		GACCTTCAGA	GACCCCCCTC	
		GAGACCCCTC	GAG	

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GAATTCCGCC AAAGAGGCCT AAAAAAAA AAAAAGAAG ATATAAGCTA CTAGTATCAA	60
AAATGAAAGA GGGCTGTTT CTACTGATCC TGCAGACACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCCGCC AAAGAGGCCT AAACTGAACT AAGAGATGCA CCTGAGAAAA CCTTGGCTTG	60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT	120
ACAAGCCAG GAAGGATTGT CTAATGATGG AGAAACATG GTAAATGTGC CACATATTCA	180
TGCAAGGTGA GGAATTGTAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT	240
TAAGAATGAA NACGCTCATT TTATAAAAAT GAGGAATCA GTAAAAAGGA CATGAGTTCC	300
TTGCCATCTC ATTGATCATC ACACTGAACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT	60
AGCCTTCTTA GACCTTCCT GTACCACTAC CTCTATGCC TTTGCCAAGT CCAAGTGTTC	120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG	168

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCCGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTC TAAAAACGTC	60
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AGTGTGCGTC CCACACAACA	TGCAAACCT CCTGCCGAGC	TGCGACCTTC	GCCTGTCACG	120
GAACCTGGTG CTGAGTGTGG	TGAGAGTGA	TCCTGCAGCA	CGTGGGCAC	180
TTTCATGTTT AGCTTTGAT	TGTGCTTATT	GTCCATTGT	ATTTCTCTT	240
GTTCAAGACT TTTCGGCTCT	GCCTGGAGGT	GGGAGGTCGC	TGCTCCGTG	300
TCTTCTCTG CTGTCTTGT	GTGTCGAC	TCAGGGAGTT	TCCCTGGGGT	360
AGAGGTGCTG GTTGACATT	TCAACGTAGG	GACAGATTCC	CAGCGTGTCT	420
TGTGCCGCTG TGTGCTACT	TGACTCGCCC	GCCTTCTTGT	TTCTCCAGGC	478

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

GAATTGGCC AAAGAGGCCT ACACACTGCA	AGAACAGAGC	CAAGAACCTA	CCATGTACCC	60
TTTACTTGGG TTTATCATTA	CTGTTTGC	CATTGCTTT	ATCATCTTG	120
ATATAGTTC	TTCCCTTG	ATTATTTGAG	AACAAACTGC	180
CGAAGAACTA	GGCATTAGCA	CATTACAAGA	ATACGATGAT	240
TGATGAGATA	TTCCGTCTA	ATCCACGAAC	AGAGATCAGA	300
GCTCGAG			AGTTAAATGC	307

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

GAATTCGGCC AAAGATTGCT	GTCTTCACAC	GTGTTCATTA	TGAAGTTATT	AGTAATACTT	60
TTGTTTCTG GACTTATAAC	TGGTTTAGA	AGTACTCTT	CCTCTAGTTT	GCCACCTAAC	120
TTACTACTAG TATCCTTGA	TGGCTTCAGA	GCTGATTATC	TGAAGAACTA	TGAAATTCCCT	180
CATCTCCAGA ATTTTATCAA	AGAAGGTGTT	TTGGTAGAGC	ATGTTAAAAA	TGTTTTATC	240
ACAAAAACAT TTCCAAACCA	CTACAGTATT	GTGACAGGCT	TGTATGAAGA	AAGCCATGGC	300
ATTGTGGCTA ATTCCATGTA	TGATCCAGTC	ACAAAGAAC	ACTTTCTGA	CTCTAATGAC	360
AAGGATCCTT TTGGTGGAA	TGAGGAGTCA	CCTATTGGG	TGACCAATCA	GCTTCAGGAA	420
AACAGATCAA GTGCTGCTGC	TATGTGGCT	GGTACTGATG	TACCCATTCA	GGATACCATC	480
TCTTCTTATT TTATGAATTCA	CAACTCCTCA	GTGTCATTG	AGGAAAGACT	AAATAATATT	540
ACTATGTGGC TAAACAATTCA	GAACCCACCA	GTCCTCGAG			579

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCCGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGAGTC	ACGCTTAGTT	60
TGCCATTGTG	CCAGCTAGTG	ATATTGCTGA	TGTTTTGTG	GGGTGTTCTT	TTAGCAAAAC	120
GTGAATGAAT	GCATGTTAC	AGGGATGCTC	TGGACTGGAG	GATGGTGAAA	TCCATCGTGG	180
TTGTCCCTCT	CCTTGAATGT	CCTTTGAG	CCAGGGCATC	TTTCCAATAT	GAATTATTAA	240
GCCTTAACCTT	ACATTTTGC	ATAACTTATA	ACTCTCCATT	ATATATTG	TTACATTTCT	300
TAGATTTTT	CAACATTCTT	TATTAAGT	ATTTTATCAG	CATCCGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCCGCC	AAAGAGGCCT	ACAAATGGGC	AGAAGTGAAA	CAGTCTTG	AGATACCTGT	60
TTTTTAAAC	TCCATTAG	AAAAGGAATT	AACTAGGACT	TTATATCTCT	TCGTTCAATA	120
TAATTTAAA	GAAGAATTGT	TGAAAGTAG	ATATGTTTG	CCATTGCTG	AGAATATTT	180
GTACGTTAGC	TGCTCTTAA	CAAAAACCAA	ATGCTTCTCT	ACTTCGATA	ATGATGTCA	240
ATTAAAATT	TGGAATGGCC	AAGATAAGTT	GCTCTGCATC	TGTCCTTCAT	ATGGCTCCTG	300
AGCACAGCTC	AGTGACTGGC	CCTTGCAGTG	CTTCCTACCGT	TGTAATGGGT	AAAACCAGGG	360
GAAACTGCCT	TGCTCTTGAG	CTTGAGCAGG	TTAATCAAAA	GGATAGAGCT	TCCACTCTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCCGCC	AAAGAGGCCT	AGAGAAAGAG	AGAAAGAAAG	GAGGGAGGAA	AAGGAAGGAA	60
GGAAGGAAAG	AAGGAAAGAA	GGAAAGAGAG	GAGACTGAAG	GGCCAAGGAG	GGCATACAAT	120
GGAAGATGAG	AGCTGTGCTC	CCCGGAGGCT	TGTACTCATC	AAGAAAGAAA	GGAGAAAGAG	180
GGGAAGAAA	AGAAAAAAAAGA	AAGGAGACAT	GAAGGAATAA	AGGAAAAAAA	GTAGAAAGGA	240
GTAGAAAGGA	AAGAAGGAGA	AGGGAGAGAA	GAAAGTAGGA	AGGAGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTGGCC AAAGAGGCC AGTGCAACTA CAGATAAGTA AACTTCGACT GGGTTTAGTA	60
ACACCTGTCT TAAATATTTG TCAGTGTACC TACATTGATA ACATTGACCT TTGGAAAAAT	120
TGGACTTGTA TTGTGTTATT TCTCTAGCAT ATTAGTCCTA AAAAAGTGTG AGTAATAGGA	180
GATGGAGAGG TGTTTGTTGA TTGTCATTCT GTGGTTCTA CAGCATTCAA GTTGCCTCG	240
TACGCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:1491:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

GAATTGGCC TTCATGGCCT AATTCTTAGA AATAAAGCCA CTATCATGCA GGTTATTTAC	60
AAGTAAAAC ATGGAGTCAG CCCAGTAGAG AAACGTTCAA ATAGTGTGGC TCCCTGCTCTG	120
CCACGTTCTG TTATGACTT TGGATATTTT ATTTATCCTT TCTGGGTAG TTTTCAACT	180
TTAAGGTCTT AATAAACTTT TAGATTTAT GACCTGTCCT CTTTACCCCT GTAAGATTTA	240
AATATTATAA AGAACCTGAT TTCAAAGACA CTGGTAACT TGGACAACTA AACAAAGTCCA	300
AGTATGGTAC TTATTTGTGT GTGTGCAAT ATTAAACCTTA TGCAATATGCT GTTTTCACAC	360
CTATTAAAC TGTTTTGAA AAACGTATAT ATCAGTTTT GGAAAACAGA AGAAGATTT	420
AAACGGCTAC TCGAG	435

(2) INFORMATION FOR SEQ ID NO:1492:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 360 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

GCGATTGAAT ACATGTTCAA TAAGGACAAT GGACAGGCC CTTTTACCAT CACTCCTGTG	60
TTTTCAGATT TTCCAGTCCA TGGGATGGAG CCCATGAACA ATGCCACAA AGGCTGTGAC	120
GAGTCGTGAG ATGAGGTAC AGCACCATGT AGCTGCCAAG ACTGCTCTAT TGCTGTGGC	180
CCCAAGCCCC AGCCCCCACC TCCTCCTGCT CCCTGGACGA TCCTGGCTT GGACGCCATG	240
TATGTCATCA TGTGGATCAC CTACATGGCG TTTTGCTTG TGTTTTGAGCATTGTTT	300
GCAGTGTGGT GCTACAGAAA ACGGTATTT GTCTCCGAGT ACACTCCCAT CGATCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:1493:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 271 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

GAATTGGGCC	TTCATGGCCT	AAGCAGACAA	TATAGTAGTA	ATTTAAATT	TTGTTCCCTG	60
ACTTTCTGTA	GTCCCCTAAC	AAACAAACAAA	AAATCCTAGT	AACTTAAAC	TTTACATTTA	120
ATAGAGATCC	AAGAGAAAAAT	AAGCCATTTT	TCACCATTTGT	GGACCCAAAT	AAATCATAGA	180
CATGGTATTAA	AGAGGCCCTT	TTCAGTCTGG	TTGCAGTATT	ATTTTCCCTAC	CTTTCTTTTT	240
CCTGTTCCCC	GCTGTATGCC	CACAGCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:1494:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

GAATTCGGCC	TTCATGGCCT	AATGGGTCAG	AAATTTGGGC	CTGGCTAAGT	GGATCCTCCA	60
CCCCAGGGTC	TCTCACAAAGG	CTGCAATCAA	AGGGCTGACT	AGGACTTGGA	ATCTCATTTG	120
AAAGTTAGAT	TGGGGAAAGGA	TCTGCTTCCA	AGCTCACTCA	GTAGTTACTG	GCAGGATTAG	180
GTTTCTCAA	GGTCGTGGA	CTAACGGGTCT	CAGTCCCTCA	CTGACAGTTG	GCCTGAGGCT	240
GCCTTCAGGT	TCTTGCCATG	TGGGCCTCCC	CAGCATAACT	GTTTACTTC	TCAAAACAAA	300
CAAAACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG	60
GTTCATGTTA GATTGTCGTC CCTTCTCTT CCTCTTCTCT TTGGGGAAA GATAATAGCA	120
CTTAATAACG CCCTCGAG	138

(2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

GAATTCGGCC AAAGAGGCCT ACAAAATTGT TCTCTTTACG TAGCAGACAG TTCTGAAATG 60
GTAGTAGTAG TAGTGCCCTT TTTTTTCTC TTTTTAGGCC AG 102

(2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 483 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

GAATTCTGGCC	AAAGAGGCCT	ATTTGTTTCT	TTGTACTGCC	TAACTTAGA	AAGACCTGNA	60
ANCGGTANCA	TGAAACATT	TTTAGAGAGA	ATTACCAAGC	ATTTTGCTA	GAATGAGTGT	120
TTAACGGAC	AGTCAGAGA	ACTCATCAA	GATGTTATT	AAAACGCGCA	GACCTGCTCC	180
AATTAAGGGC	CCAGTCAGTG	GTGTTAACAG	TGAAGGGACT	GTTCCAGAGG	CGTGCTGCAC	240
GGGACGCCA	CCCCAAATAC	AAATGGTTG	CCAGTAGCTC	ACAAATGAAC	CCCATTGCT	300
TGCACTTAAG	CTTCTGAAAG	CACATACATA	TCCTGTTTG	TGCTTTCCGC	CCTATAGTAA	360
ACGCAAACCA	ATGGAGATGT	GAAGCAATCT	AATAGCAACA	AGGCAAACCT	CTACTTCCTC	420
TAAAGAGGAT	TGCATCCTCT	TGCTATCTT	GCCGATGCTC	TCCTACAGAC	CCATCCGCTC	480
GAG						483

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

GAATTCTGGCC	AAAGAGGCCT	AAAATTCAA	TAGGCTATAG	AGTTTCCAT	GAGAGTGTGT	60
GTGTGTGTGT	GTGTGTGTGT	GTGTAAAGAA	CTCTTACATT	TCAGTGAGAA	AATATTTC	120
TTGAAAGGAA	ACACAGAACT	CGAG				144

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

GAATTCTGGCC	AAAGAGGCCT	AAAATAACTG	TCCAATTAAC	TGAACACTGA	GGTAGCTGG	60
TACAGACTTT	AGCGGCTACA	TTTGACAAAC	ATTGCAATTA	CAAGCAGCAA	CACAAACCAA	120
CCTGGGATG	GGGATAGAAA	TCTTTCNNT	CTTCNTTCTT	GGGGGTTGA	GACAGAGTCT	180
CGCTCTGTCA	CCCAAGGCGG	AGTGCAGTGG	CGCAATCTCC	GCTCACTGCA	AACTCCACCT	240
CCTGGGTTC	AGTGATCCTC	CTGCCTCAGC	CTCCCAAGTA	GCTTGATTA	TGGGTGCCA	300
CCACCATGCC	TGGCTAATT	TTGTATGTTT	GATAGAAACG	GTGTTCAACC	CTGTTGACCA	360
GGCTGGCCTT	GAGCTCCTGA	TCAGGGTGA	TCCACCTGCC	TCAGCCCCCC	GACTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 337 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTGGCC AAAGAGGCCT ACAAAAGACCA AGGTATCACCA TTCTGCCATT AGCTGCTACC	60
TCTCCCTTCC CCATTTTCAG ACAGATTGAG CCCACTTTTT GTGTCCCTCT CTGCTCTTAA	120
GCTGTTTCTC ATCGTGGGTG CTCAGCAACT TGTCTGCTCT CACTCTAGTT TCTATTTGCT	180
TCCCTGAAAT TAGCCTTTAA CTATGCCAG ACAAGGCCAGA GCCTTGCTTA AACTTCTAAT	240
TCCTCTGTGC TTCTTAGTGT ATCCTTCTG CCTGCTTGCC TGCCCTGCCCTT CCTGCCTGCT	300
TGCCCTGCCCTT ACTGACCCCTT TGCCCCACGC TCTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 105 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

GAATTGGCC AAAGAGGCCT AAACCGTCGA TTGAATTCTA GACCAGCCTC ATCTCCTGTT	60
CCTCTCTCCC TCCCAACTAT GTTGGCCTCC CTGCTGCTCC TCGAG	105

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 701 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

GAATTGGCC AAAGAGGCCT ACTGTGAACC TAAAACCTCCT ATAAAGAAAA GTAAAGTCTT	60
AAAAACAAAC AAATAACACAG CAACAATCTT ATTTTCCCA GCCTGCTTA TGTTAGGGTG	120
CAGATGTGAT TTCTGTGTCG CTAATCAGAT GCCCTTGTG GAGAGACTGA TTGAAACAGA	180
GGCGGGGCA TCCATCTTTC TAGTGTCACT CACAGCAGAA GCAGTGAGGT CCTGGTGTCT	240
GTCGCTGCAG TGGTGGCTTT TGATACAGGA GTTCCCTGAT GGCAGTAGCT TCTTGTGGG	300
TTCAGTTCTG TTGTGTGGTT CTGCAAGTTC AGCTTAGAGT CTGTTCTTC AGCTGTTCA	360
ATGACCCCTCT GAGCTGTCTA CCATGAAAAA TTCTATCTG CTTACACTAA TTAGAGCCAA	420
TCCGTGTTATT TACAAATGAA TATCTGACCA AGTAATGAAG GTCTAGACTT AACTGTAATA	480
TTTATGACT TAAATTGTTG GCATATGTGA AAACCTTTG TTTATCTAA ACTTTTTGT	540
TGTTGTTGTA AAATAAAACA TTATGAAAAA GCGCACCAAA AAGGATAACA AATGAGAGTA	600
ATGCAACATA CAGGCACCAAG CAACTCAGGC CAGGGAGATG ATATATGAGC ATCCCCAAC	660
TCCCCTTAC ACTCCCTCAA ATAACCTAA CAAGACTCGA G	701

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

GAATTGGGCC TTCATGGCCT AGGAACTAGG TGACTTTGGG GCTCATCTCA CAAGTTTCCTA	60
TACACCTAGG GATCAGTCTT TTGCTTCCTG TTGTCCCTG CCTGAAAGTA GTTGCCAAAGT	120
TGTAATGTTT TATATATCCA CCACAGCATG AGTTAAACCA AAGTCTGGAT CAGCAGACTG	180
CCAGATTTTT TTTAACAAA TTTATTAATC AATACATTT GTCCATGTCT ACAGTTGTTT	240
ATGGGGGAGA ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

GAATTGGGCC TTCATGGCCT AGGGGACCTT GGGAGAAATGT AATCCCTGCC CCTAGTCTCA	60
GTTTCTGCAT CCACGGAAAGA GGGGTGAAGA TGGTCCCTAC CCCTCCAGAA TGTTCTTTTT	120
TTTTTTTTTT AAAAAGAAAAA AAAAAGAAAAA AAAGTACGTT ATGTTTCAG ATAAGAACAC	180
TTCTTCATGG ATGACTTGAA ATAATTGCCA TGGTCCCTAA GTTTCCCTCT CTGTAGATGA	240
ATGATATAGC TCAGTATCTA AGCAGTGGAT CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 341 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

GAATTGGGCC TTCATGGCCT AGACCTGCC CGAGCCTCCC AAGCTGCTGG TATTACAGGC	60
GTGAAACACT GCACCTGGCC TAATACGATA TTCTTACAAT TTAAAAAAATG AAAGCAGAGG	120
AATGGTGGCA GGGAAAGCTGA CATTAAAGA GTTCACTTCC TTGTAGTTAT CACAGTTAAT	180
TCTTACTGTT AGAATAAGTG GTAACCTGCC AAGGTCAAT TGCTAGATGT CAGAGCAGAA	240
ATTAGAAATC AGGTCTAGCC AAGGCCATCA CACTTCTAG AGCATTAAACA ATTCAATTCA	300
GTTAGTGTGTT ATTGAACACC TATTGTGTC TGGCCCTCGA G	341

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 270 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

GAATTGGCC	TTCATGGCCT	AGGCATTTG	TCTCTAGAAT	TACCCACCCG	TTCCCTGCGCT	60
CTACGGTTCT	CCATGCC	TCCAGTTGG	GGGTCTAAC	CGAACAGGAG	AGGTGCAGGG	120
GACCAGGAGG	TGTCCCTGCGA	CAAAGGTTCG	GGGGTCTCCC	TGGCAAGGGG	TCCCAGGGCC	180
TGGAGCCCCG	GGCCCAGCCA	AAAGCACACA	GCATCAAAAC	ATGTTTTAG	TGGGAAGCTC	240
CAGGCCCTGC	CCCTCCCCGG	GGGCCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

GAATTGGCC	TTCATGGCCT	AGAGCAGGAA	GATTGTGTGA	GTGCTGGGGT	TTGGGGGTGC	60
CCAAGTTGGG	AACCAGTGGA	GGGAGAGAGA	GGTAGGAGGT	AGATGGATGG	AGATCAAAGG	120
CCAGGCCCTGT	GGCCAAGGGG	GCTGCTAAC	CTTCACCCCT	GTGTTAGCCT	GTACACTCAC	180
CAGGCCAGGC	TCAGCAGGCG	GGCTGTTAC	CTCCTGGCAG	CAAATGGTCC	AGAATGTGCC	240
CTCGCTGCAG	CCCAGCTGGC	TCCAGAAGGG	GGACCACAGA	GGCTGGAGCT	ATGCATGCAC	300
AGTGCTTCT	CCCAACCTTG	CTTCTGAGAA	AAAGTGTCCCT	GCGAGGGCCC	TGGAGGGAGGG	360
AGCTAGGGAC	CAGCAGAAGG	GCCTAGGTTT	CTGTAGCATC	ATTTTAGCC	CTGGCTGAAT	420
CTGGGAAGCA	CCTGGTGGCT	TTAACATTCC	CGTTAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

GAATTGGCC	TTCATGGCCT	AGTCACAATC	CACTTAAAGA	AGTTTGGTTA	TATTTCAGTG	60
AAATTTTCT	TCCAGAGTAG	GTTTTTTTTC	GTGGGGTTGG	GGGTAACCTTT	ACTACAATT	120
GTAAGTATGG	TGCGAGATT	CATGCAAATG	AGGAGTGCCA	GCAGTGATG	AATTAAACA	180
TATTAAACA	AAAACAAAAAA	AAATGAATGC	ACAAACTTGC	TGCTGCTTAG	ATCAGTCAG	240
CTTCTAGGAC	CCGGTTCTT	TTACTGATT	AAAAACAAAA	CAAAAAAA	AAAAAAAGTT	300
GTGCTGAAA	TGAATCTGT	TTTTTTTAT	AAAGTAGCCGC	CTGGTTACTG	TGTCTGTAA	360
AATAACAGACA	CTTGACCCCT	GGGTAGCTT	CTGTTCACT	TTATATCAGG	GGAATGGATG	420
GGTCTGATT	CTTGGCCCT	TTCTTGAATT	GGCCATATAC	AGGTCCTG	GCCAGTGGAC	480
TGAAGGCTT	GTCTAAGATG	ACAAGGGTCA	GTCAGGGGA	TGTGGGGAG	GGCGGTTTA	540
TCTTCCCCCT	TGTCGTTG	GGTTTTGATC	TCTGGGTTAA	GAGGCCGTTT	ATCTTTGAA	600
ACACGAAACA	TTTTGCTT	CTCAAGTTTT	CTGTTAATGG	CGAAAAGATG	GAAGCGAATA	660
AAAGTTTACT	GATTTTGAG	ACACTAGACT	CGAG			694

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

GAATTCTGGCC	TTCATGGCCT	AATGAGGTTC	TATCTAGAGG	TGATGGGAGA	CAGTGACAGA	60
TCATCAGCA	TTAGATTCTC	ATAAGGACTG	CGCAACCTAG	ATCCCTTCAA	TGAAACAGTTC	120
ACAATAGGT	TCACTCTCCA	ATGAGAACATCT	AATGCTGCCG	CTGATCTGAC	AGGTGCCAGA	180
GCTCAGCGG	TAATACGAGA	GGCTGGAGAT	ACAGATAAAG	CTTCAGTTGC	TTGCCCGCCA	240
CTTACCTCTC	CTTGTGCGGC	CGAGTTCTA	ACAGGCCACA	GACCGCTACC	AGTCCATGGC	300
CTGGAAGTTG	GGGACCCCTC	TACTGGGATA	TTTATAATTG	CATATGTGGT	TACCTAATAT	360
TTCCATGATA	CAACACTGGT	CTAGATTCTA	GGCCATTCTC	CTTCAAAAAG	AACCTGCTT	420
CCTTACAGTT	TTACTGTTA	GCAGCAATGT	TTTCTACCCC	TTCTAAAAT	TTTCAGGCCAC	480
CACACTCGAG						490

(2) INFORMATION FOR SEQ ID NO:1510:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

GAATTCTGGCC	TTCATGGCCT	ACTCTCTCAT	TCCTACCCCTC	CTCCCCTCCA	CTCACGCTCC	60
TCCCAATCCC	CAAGGTCTC	TCATCCCCAC	CTTCCTCCCT	TCCTCTCCTC	ACGCTCCTCC	120
CTATCCCCGA	GTCCTCTCT	CATCCCTACC	CTCCTCCCTC	CCACTCACGC	TCCTCCCAAT	180
CCCCAAGGTC	CTCTCATTCC	CACCTTCCTC	CCTTCCTCTC	CTCACGCTCC	TCCCTATCCC	240
CGAGCTCCTC	TCTCACTCCC	TCCCTCCCTC	CATGCTCCTC	CCCCCTCTCC	TCATGCTCCT	300
CCCCATCCTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:1511:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

GCCGGGTGGG	CCGGAGGTGG	CGCGGCCGCA	CGGCTTTGTT	CCGGAAAGCC	CTTAGGTGGA	60
GAGCGATGTG	GGCGCGGGCA	GGGGGATCGC	GTAGAGGAAC	CTTCGCGCAC	CGCCTCTCCG	120
GGTCTGGAA	TCTGCTGAAC	TCCTTGGCTC	TCTTGGGTC	CCTCGAACGC	CCCAGCTAAG	180
AAGGGGGGGG	GCCTTGCCAG	GGCGCGAGCA	ACATGACGTT	CAAGGTCTTC	CTGTGGCTTC	240
TGTAAAGAAA	TGTTCACGTG	GGAGCCTGTC	CACATGGCT	GTACTAAGGA	TCTGGCACGA	300
GGAAGAAATA	TCACTGCAGA	ACCTGAAGCC	CTCCGTTGGA	AGGGTCACCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:1512:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 407 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

GAATTCGGCC	AAAGAGGCCT	AGAGCAGCTT	GGCTAAAAGT	AAGGGTGTG	TGCTGATGGC	60
CCTGTGCGCA	CTGACCCGCG	CTCTGCCGTC	TCTGAACTG	GCGCCCCCGA	CCCTCGCCGC	120
CCCTGCCCG	AGCTGTTC	CCGCCGCCCA	GATGATGAAC	AATGGCTCC	TCCAACAGCC	180
CTCTGCCCTG	ATGTTGCTCC	CTGCCGCC	AGTTCTACT	TCTGTGGCCC	TTAATGCCAA	240
CTTTGTGTC	TGAAAGAGTC	GTACCAAGTA	CACCATTA	CCAGTGAGA	TGAGGAAGTC	300
TGGGGCCGA	GACCACACAG	GTGGGAACAA	GGACAGGGGG	ATTTAACGAG	TCAAAAGGAA	360
AAACATGTTA	AGACCTAGA	CTTGTATATT	GACACACAGA	ACTCGAG		407

(2) INFORMATION FOR SEQ ID NO:1513:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 422 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

GAATTCGGCC	AAAGAGGCCT	ACATTACATAC	AATTACAGAA	TTCAAATATT	GCAAAAGGAT	60
GTGTGTCTTT	CTCCCGAGC	TCCCCTGTT	CCCTTCATTG	AAAACCACCA	CGGTGCCATC	120
TCTTGTGTAT	GCAGGGCTAT	GCACCTGCAG	GCACGTGTG	ATGCACTCC	CGCTTGTGTT	180
TACACAAGCT	GTGGGGTGT	ACGCATGCCT	GCTTTTTCA	CTTAATAATA	CAGCTTGGAG	240
AGATTTTGT	ATCACATTAT	AAATCCCACT	CGCTCTTTT	GATGCCACAA	TAATAACTAC	300
TGCATAATAT	GGATACGCCT	TATTTGATTT	AACTAGTTCC	CTAATGATGG	ACTTTAAGT	360
TGTTTCCCTT	TTTTTCTTT	TTTGCTACTG	CAAACGATGC	TATCTAGGCC	TCTTTGGCCG	420
AA						422

(2) INFORMATION FOR SEQ ID NO:1514:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 485 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

GAATTCGGCC	AAAGAGGCCT	ATGGAAATT	AAGACCTGAT	GTGGAGGGAG	ATGAGGGAAA	60
CTCTAAAAAA	TGACCTAAAAA	GCAGTTTTAG	GAGGAAAGC	TACAATACCT	GAGGTAAAGA	120
ATTCAGAGAA	CTCCAGTAGT	AGGACAGAGT	TTCAGCAAAT	AATCAATTAA	GCATTACAAA	180
AAACAGGGAT	GGTAGGGAAA	ATAGAAGGAG	AAAACTCTAA	AATAGGTGAT	GATAATGAAA	240
ATTTAACCTT	TAAATTAGAA	GTAAATGAGC	TGAGTGTTAA	ATTAGACAAAC	ACTAACGAAT	300
ACAATAGTAA	TGATGGTAAG	AAATTACCCC	AGGGTGAATC	ACGAAGTTAC	GAAGTCATGG	360
GAAGTATGGA	AGAAACCTTA	TGCAATATAG	ATGACAGAGA	TGGAATTCGC	AATGTCCATT	420
TAGAATTAC	AGAAAGAGAG	AGTAGGAAGG	ATGGAGAGGA	TGAATTGTC	AAAGAAAAAC	480

TCGAG

485

(2) INFORMATION FOR SEQ ID NO:1515:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

GAATTCTGCC	AAAGAGGCCT	AGGCACAGAA	GGGTGGTGAG	TGTGATCAA	TCTAGTCTCA	60
CTCCCACTTT	TTAGTCTCAC	TCTACTTTT	GTCACCAC	CAGGCAACGA	GAGAAAGGAA	120
TGTTTAGCAC	AAGACACAGC	GGAGCTCGG	ATTGGCTAAA	CTCCCCATAGT	ATTATGGTG	180
GCCGCCGCG	GGGGCCCCAG	CCCAGCTTGC	AGGCCACCTC	TAGCTTTCTT	CCTACCCCAT	240
TCCCCGCTTC	CCTCCTCCTC	CCCTGCAGCC	TGGTTAGGTG	GATACTGCC	CTGACATGTG	300
AGGCAAGCTA	AGGCCTGGAG	GGTCAGATGG	GAGACCAGGT	CCCAAGGGAG	CAAGACCTCG	360
CGAAGCGCAG	CAGCCCCGGC	CCTAGGCCTC	TTTGGCCGAA			400

(2) INFORMATION FOR SEQ ID NO:1516:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

GAATTCGCGG	CCCGCGTCGAC	GTCGACGCGG	CCGCGAATT	GGCCAAGAG	GCCTACCCAT	60
GTCATCAAG	ATGGGTGATT	ATGAAATGCC	AGACTTCTAA	AATAAATGTT	TTGGAATTCA	120
ATGGTAAAT	AAATGCTGGC	TCGAG				145

(2) INFORMATION FOR SEQ ID NO:1517:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

GCTGGACCTC	CTGTGCAAGA	ACATGAAACA	GCTGTGGTTC	TTCCTTCTCC	TGGTGGCAGC	60
TCCCAGATCG	GTTCTGTCCC	AGGTGCAGCT	GCGGGAGTCG	GGCCCAGGAC	TGGTGAAGCC	120
TTCGGAGACC	CTGCTCCCTCA	CCTGCACTGT	CTCTGGTACT	TCCGTAGAA	GTGTTAGTTA	180
CGACTGGAGT	TGGCTCCGGC	AGTCCCCGGG	GAAGGGACTG	GAGTGGCTTG	GAGAGATTGA	240
TTACAGGGGG	AGAGGCAATT	ACAACCCGTC	CCTCGAG			277

(2) INFORMATION FOR SEQ ID NO:1518:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 161 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC AAAGAGGCCT ACTCATGCAC CTAATTGGAT CCTATCTTG TGTTGTTAGC	60
TGGTTATTAT GCAGACTTTA TTATGTGGTT GTTTTATAGT GTCCATAACC TATGTACTTA	120
AGTTGTTTT TGTGGTGGCG CTTCCAATTA GGGCTCTCGA G	161

(2) INFORMATION FOR SEQ ID NO:1519:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 561 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC TTCATGGCCT AATATAAAAC AATGTTTTTC AAGGCATTAT ATAATAGGCT	60
AAGGACAGTG ACCTCCAAGA GACAGCAAAAC AAGGTAATAC CTGTGACTGC TCCAGCTTAC	120
TGCCCTGAGA GAATTAATAG TAGGTTGTG GTACAGGGAG GGAGAATCCA GTCAGAGCCC	180
AGCGGACTTG CTGAATTAAAG GAAATGGAGC TGAGAGTCCA GAGAGACCAA CATGGCTAAA	240
GTTGTCATGA CAGAGCACTC AGAACTAGAG AGCTGCCACAG CAACATTAACC TAAGAGCTCT	300
GAAGATAATC TCCCTCAAAT ACTCAGCTGA GTACTGATCA ACATATAATGT GTGAGGAAGC	360
TATCTGAGGC TGACAAAGAA CTGCCCTGAAG AGATTAGAGG GAACAGTACT TGGCACTCAC	420
ACAGAATTGG AAACTGTACC TGTTCCCACC AGCCAAACTG GAAAAACCTC AGGATTCACTG	480
GGGTACTCAG AAAGGACTTC CATCAGGTAT GGGGAATAAT TAGCCCTAGA CAGAGCACTG	540
CTCTAACCCCC ATCCACTCGA G	561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID

NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172,

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NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, SEQ ID NO:1500, SEQ ID NO:1501, SEQ ID NO:1502, SEQ ID NO:1503, SEQ ID NO:1504, SEQ ID NO:1505, SEQ ID NO:1506, SEQ ID NO:1507, SEQ ID NO:1508, SEQ ID NO:1509, SEQ ID NO:1510, SEQ ID NO:1511, SEQ ID NO:1512, SEQ ID NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.